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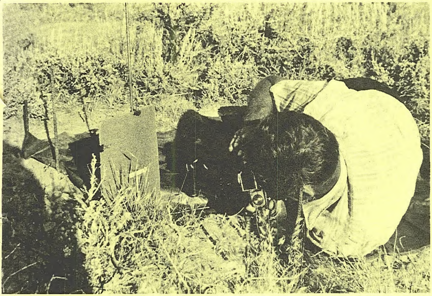

PHENOLOGY AND PRODUCTION STUDIES ON
SEMI-ARID SHRUB TYPES

SUBMITTED BY WYOMING AGRICULTURAL EXPERIMENT STATION

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COVER: Since the inception of the phenology studies in 1973 much quantitative data of plant growth rates has been accumulated for evaluation of interrelationship with environmental functions and application to management and use of rangeland. Some qualitative capability must be developed by range managers to be able to express a phenophase of a plant or plant community. The art of describing phenological stages requires a knowledge of plant appearance by growth stage. To this end, closeup photos of identified branches or plants, such as those of the cover, have been taken at intervals at a number of locations.

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PHENOLOGY AND PRODUCTION STUDIES ON SEMI-ARID SHRUB TYPES[1]

1975 ANNUAL PROGRESS REPORT

BY

H. G. Fisser and L. H. Kleinman[2]

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[1] Published with the approval of the Director, Wyoming Agricultural Experiment Station, as Scientific Report No. 831

[2] Professor of Range Management and Research Associate, Range Management Section, University of Wyoming, Laramie, respectively.

ENCLOSURE( )

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SECTION I

PHENOLOGY STUDY

1975

Introduction

Phenological study of important plant species in terms of productivity and microenvironmental variations will provide information that can be used to increase the efficiency of Bureau decision making with respect to management alternatives and disposition of natural resource areas.

Phenology studies of important shrub and grass species will provide detailed biological information related to specific changes in environmental characteristics such as time, duration, temperature, and movement. Very little detailed phenology and productivity information is available for arid land species of the western United States. Basic scientific knowledge and more precise information related to the Bureau's multiple resource management techniques will be enhanced by this phenology study.

Artemisia tridentata, *Artemisia nova*, *Agropyron smithii*, and *Agropyron spicatum* are the major shrub and grass species in the intermountain region on semi-arid, low elevation grazing ranges of public land. These species are especially important in the semi-arid regions of the western half of Wyoming from the Montana border on the north and the Utah and Colorado borders on the south. Their importance in adjacent states is equally significant. The ecological divergence of these four species is very great. They are found from high elevations to very low elevations, and from mesic to xeric situations. Therefore, these four species, in the development of the cooperative research program between the Bureau of Land Management and the University of Wyoming, were selected for intensive studies; to determine interrelationships of phenology, production, environment and utilization. These kinds of data are of major importance to the BLM for development of efficient and sound resource management decisions.

Intensive phenological studies were located on 12 selected exclosure areas. First level evaluation areas are: Demer exclosure, Farson exclosure, Horse Creek exclosure, Shoshoni Ant #7 exclosure, and Sweetwater exclosure. Second level evaluation areas are: Bud Kimball exclosure, Cedar Mountain exclosure, Cumberland #3 exclosure, Mesa Antelope exclosure, Owl Draw exclosure, Red Wash #2 exclosure and Upper Gov't Draw exclosure.

Phenophase descriptions and stages with numerical scales were set up for four specific plant species: *Agropyron smithii*, *A. spicatum*, *Artemisia nova*, and *A. tridentata*, plus one phenological inventory for all plant species. Seasonal development (March-December) was recorded for 100 plant species in 12 exclosure areas. Individual plants of the four principal species in each of the 12 selected exclosure areas were permanently located for repeated observation.

Plans for 1976 call for a continuation of data collection. Criteria for environmental data will be established, and the data collected. There will be continued revision and sophistication of present numerical descriptions of plant growth characters. Statistical and computer analysis of the several environmental factors, productivity and plant growth will be devised and implemented. Soil characteristics of each study site will be included in the analyses as variables to determine their relationships to the phenodynamics of the involved plants.

Objectives

The objectives of the study are to determine:

(1) the relationship of phenodynamics with vegetation production and environmental data;

(2) relationships of phenodynamics and environmental characteristics to grazing and management procedures.

Methods and Procedures

Twenty individual plants of each of the four principal species were permanently located along a 100 foot line in 12 exclosures. Every 5 ft. on the line, directions along and from the line for the closest plant were recorded.

Phenological measurements of *Artemisia nova* and *A. tridentata* included plant size, age, vegetative stages of growth with twig length, and reproductive stages of flowering and seed ripening with seed stalk length. Phenological measurements of *Agropyron smithii* and *A. spicatum* included plant size, age, vegetative stages of growth with leaf width and height; reproductive stages with spike height, number of spikelets per seed head and seed head development.

Phenological stages and numerical scores for shrubs and forbs are:

1. = initial start of growth of the plant;
2. = early vegetative growth -- the new leaves are developing and elongating;
3. = immature vegetative growth -- the new twigs are elongating;
4. = full vegetative growth -- the leaves and twigs are fully developed;

5. = floral bud stage -- the first buds begin development to the initiation of bloom;
6. = early bloom -- includes the initiation of bloom to 10% bloom;
7. = mid-bloom -- includes 10% to 75% of bloom;
8. = full-bloom -- includes 75% bloom to 100% bloom;
9. = late bloom -- the flowers are drying and seeds are beginning to form;
10. = milk stage -- the seeds are soft and immature (not well-formed);
11. = dough stage -- the seed is well-formed but still soft;
12. = ripe seed -- the seed is mature and hard;
13. = past ripe -- the seed is ripe but not shattered, and reproductive parts of the plant (seed, stalk, etc.) are mature, and are beginning to weather;
14. = mature vegetative -- the vegetative parts are beginning to brown to complete browning;
15. = mature reproductive -- the reproductive parts are curing (stem, leaf and seeds are shattering);
16. = fall regreening -- and/or leaf shed;
17. = winter dormancy.

The plant age classes of shrubs are classified as:

1. = seedling;
2. = young and small;
3. = intermediate age and size;
4. = mature age and size;
5. = old and decadent.

The phenological stages and numerical scores for grasses are:

1. = first leaf stage -- from the appearance of first leaf to appearance of second leaf;
2. = second leaf stage -- from the appearance of second leaf to appearance of third leaf;
3. = third leaf stage -- from the appearance of the third leaf to appearance of the fourth leaf;
4. = fourth leaf development -- from the appearance of the fourth leaf to full leaf development;
5. = boot stage -- the seed stalk is elongating and the noticeable swelling of the seed head in boot;
6. = seed head emergence -- from the beginning of emergence of the seed head to the start of anthesis;
7. = early anthesis -- from initiation of anthesis to 10% of florets in bloom;
8. = mid-anthesis -- from 10% of florets in bloom to 75% of florets in bloom;
9. = full anthesis -- 75% and more of the florets in bloom;
10. = milk stage -- the seed is soft and immature (not well-formed);
11. = dough stage -- the seed is well-formed but still soft;
12. = ripe seed -- the seed is well-formed and hard;
13. = past ripe -- the reproductive parts begin to weather;
14. = vegetative parts browning;
15. = reproductive parts curing -- stems, leaves and seeds cast;
16. = fall regreening -- with adequate fall moisture and temperature there is fall regrowth;
17. = winter dormancy.

The maturity of Agropyron spicatum clumps are classified as: (a) seedling, (b) young, (c) intermediate, (d) mature and (e) old. Each maturity classification can then be designated as: (a) sparse, (b) intermediate, (c) dense and (d) decadent.

Results

An alphabetical listing of each study exclosure, the county where located and the principal phenology species is shown in Table I. Table II is an alphabetical listing of 118 species found in the 12 phenology study exclosures. A phenological inventory of all species in each area is given in Table III. Table IV is a listing of the permanently located plants of the four principal species in each area. The phenological development (growth initiation, full bloom and start of seed dissemination dates) for the four principal species in each of the study areas are given in Table V. Table VI is a list of the 17 independent variables and one dependent variable used in the step-wise multiple regression analysis. Table VII is the simple correlation matrix of all independent and dependent variables for each of the four species. Table VIII is a listing of the significant simple correlation coefficients for each of the four species. Table IX is the results of the step-wise selection process for each species. Figure 1 shows the phenological development averages for the four principal species in all of the study areas for the years 1973 - 1975. Phenological progression curves for each of the four principal species in selected study areas are given in Figure 2.

Growth initiation, full bloom and start of seed dissemination dates were recorded for the four species in the 12 study areas from 1973 through 1975. Growth initiation for Agropyron smithii varied from March 5 to April 26, with an average date of March 15. Full bloom dates varied from June

20 to July 20, with an average date of July 10. Start of seed dissemination varied from July 25 to November 10, with an average date of August 15.

Growth initiation for *Agropyron spicatum* varied from March 1 to April 15, with the average date March 10. Full bloom varied from June 10 to July 15, with the average date June 30. Start of seed dissemination varied from July 10 to August 15, with an average date of July 30. Seed dissemination appeared to always be one month after full bloom.

Growth initiation for *Artemisia nova* varied from May 15 to May 30, with an average date of May 20. Full bloom varied from September 15 to September 20, with an average date of September 15. Start of seed dissemination varied from October 25 to November 5, with an average date of November 5.

Growth initiation for *Artemisia tridentata* varied from April 22 to June 15, with an average date of May 15. Full bloom varied from August 5 to October 10, with an average date of September 15. Seed dissemination varied from October 14 to November 20, with an average date of November 10.

The sagebrush species produced new leaves spring and summer. Many leaves persist through the winter but are shed before clipping starts the next fall.

Seventeen independent variables (environmental and forage production factors) and phenology were analyzed by step-wise multiple regression procedures. Simple correlation and multiple regression correlations were found for each species. The change in phenology of *Agropyron smithii* was significantly correlated with ten of the 17 independent variables. The phenology of *Agropyron spicatum* was significantly correlated with 13 of the 17 independent variables. Phenology of *Artemisia nova* was significantly correlated with five of the independent variables. *Artemisia tridentata* phenology was correlated with six of the 17 independent variables.

The results of the step-wise selection process for *Agropyron smithii* showed that ten of the 17 independent variables accounted for 42% of the variation in its phenological change. For *Agropyron spicatum* four environmental variables were significant and explained 74% of the variation in its phenological change. Six environmental factors were significant and explained 32% of the variation in the phenological change of *Artemisia nova*. Thirteen environmental and productivity factors were significant and explained 43% of the variation in the phenological change of *Artemisia tridentata*.

Temperature extremes are important in influencing phenological change. In fact, both air and soil temperature extremes dictate the time of growth initiation for the four species studied.

These results have been derived from the abstract of the Ph.D. dissertation completed by Larry H. Kleinman in December 1976. The title of the dissertation is "Phenology and ecology of sagebrush-grass rangelands".

TABLE I. Alphabetical listing of study areas, the county where each occurs, and the principle species.

Exclosure Name	County	Principle Species
Bud Kimball	Washakie	Agropyron smithii Artemisia tridentata
Cedar Mountain	Sweetwater	Agropyron spicatum Artemisia tridentata
Cumberland #3	Lincoln	Agropyron smithii Agropyron spicatum Artemisia tridentata
Demer	Washakie	Agropyron smithii Agropyron spicatum Artemisia tridentata
Farson	Sweetwater	Agropyron smithii Artemisia tridentata
Horse Creek	Big Horn	Agropyron smithii Agropyron spicatum Artemisia nova Artemisia tridentata
Mesa Antelope	Sublette	Agropyron smithii Artemisia tridentata
Owl Draw	Natrona	Agropyron smithii Agropyron spicatum Artemisia nova Artemisia tridentata
Red Wash #2	Sweetwater	Agropyron smithii Agropyron spicatum Artemisia tridentata
Shoshone Ant #7	Fremont	Agropyron smithii Artemisia tridentata
Sweetwater	Fremont	Agropyron smithii Artemisia nova Artemisia tridentata
Upper Gov't. Draw	Fremont	Agropyron smithii Artemisia tridentata

TABLE II LIST OF PLANT SPECIES NAMES WHICH OCCURRED IN PHENOLOGY STUDY AREAS

Code	Genus-Species	Common Name	Life Form	Longevity
AGCR	Agropyron cristatum	Crested wheatgrass	Grass	Perennial
AGGL	Agoseris glauca	Pale agoseris	Forb	Perennial
AGSM	Agropyron smithii	Western wheatgrass	Grass	Perennial
AGSP	Agropyron spicatum	Bluebunch wheatgrass	Grass	Perennial
ALTE	Allium textile	Textile onion	Forb	Perennial
AMAL	Amelanchiar alnifolia	Serviceberry	Shrub	Perennial
ANDI	Antennaria dimorpha	Low pussytoes	Forb	Perennial
ANRO	Antennaria rosea	Rose pussytoes	Forb	Perennial
ARCO	Arenaria congesta	Ballhead sandwort	Forb	Perennial
ARFR	Artemisia frigida	Fringed sagewort	Half-shrub	Perennial
ARHO	Arenaria hookeri	Hooker sandwort	Forb	Perennial
ARHO2	Arabis holboellii	Holboell rockcress	Forb	Perennial
ARLI	Arabis lignifera	Woody rockcress	Forb	Annual
ARLO	Aristida longiseta	Red three-awn	Grass	Perennial
ARNO	Artemisia nova	Black sagebrush	Shrub	Perennial
ARSP	Artemisia spinescens	Bud sagebrush	Half-shrub	Perennial
ARTR	Artemisia tridentata	Big sagebrush	Shrub	Perennial
ARTR	Artemisia tridentata vas.	Mtn. Big sagebrush	Shrub	Perennial
AST	Astragalus spp.	Milkvetch	Forb	Perennial
ASCA	Aster canescens	Hoary aster	Forb	Perennial
ASCI	Astragalus cibarius	Silky milkvetch	Forb	Perennial
ASDI	Astragalus diversifolius	Meadow milkvetch	Forb	Perennial
ASPU	Astragalus purshii	Pursh loco	Forb	Perennial
ASKE	Astragalus kentrophyta	Nuttall kentrophyta milkvetch	Forb	Perennial
ASSP	Astragalus spatulatus	Tufted milkvetch	Forb	Perennial
ATCO	Atriplex confertifolia	Shadscale saltbush	Shrub	Perennial
ATGA	Atriplex gardeneri	Gardener saltbush	Half-shrub	Perennial
BASA	Balsamorhiza sagittata	Arrowleaf balsamroot	Forb	Perennial
BOGR	Bouteloua gracilis	Blue grama	Grass	Perennial
BRCO	Bromus commutatus	Hairy chess	Grass	Annual
BRTE	Bromus tectorum	Cheatgrass	Grass	Annual
CAAN	Castilleja angustifolia	Narrowleaf Indian paintbrush	Forb	Perennial
CAEL	Carex eleocharis	Needleleaf sedge	Sedge	Perennial
CAFI	Carex filifolia	Threadleaf sedge	Sedge	Perennial
CAMI	Camelina microcarpa	Littlepod falseflax	Forb	Annual
CANU	Calochortus nuttallii	Mariposa lily	Forb	Perennial
CAS	Castilleja spp.	Paintbrush	Forb	Perennial
CHDO	Chaenactis douglasii	Douglas dustymaiden	Forb	Perennial
CHFR	Chenopodium fremonti	Fremont goosefoot	Forb	Annual
CHNA	Chrysothamnus nauseosus	Rubber rabbitbrush	Shrub	Perennial
CHVI	Chrysothamnus viscidiflorus	Green rabbitbrush	Shrub	Perennial
CIR	Cirsium spp.	Thistle	Forb	Perennial
COPA	Comandra pallida	False toadflax	Forb	Perennial
CORA	Cordylanthus ramosus	Branched birdbeak	Forb	Perennial
CRBR	Cryptantha bradburiana	Miners candle	Forb	Perennial
CRFL	Cryptantha flavoculata	Roughseed cryptantha	Forb	Perennial
CRE	Crepis spp.	Hawksbeard	Forb	
CYMO	Cymopterus montanus	Falsecarrot	Forb	Perennial
DEGE	Delphinium gayeri	Plains larkspur	Forb	Perennial
DEPI	Descurainia pinnata	Pinnate tansymustard	Forb	Annual

TABLE II (continued)

Code	Genus-Species	Common Name	Life Form	Longevity
ERAS	Erysimum aspermum	Plains wallflower	Forb	Perennial
ERCA	Erigeron canadensis	Horseweed fleabane	Forb	Annual
ERFL	Eriogonum flavum	Yellow wildbuckwheat	Half-shrub	Perennial
ERMI	Eriogonum microthecum	Slenderbush wildbuckwheat	Forb	Perennial
EROV	Eriogonum ovalifolium	Cushion wildbuckwheat	Forb	Perennial
ERPU	Erigeron pumilus	Low fleabane	Forb	Perennial
ERSU	Eriogonum subalpinum	Subalpine wildbuckwheat	Forb	Perennial
ERI	Erigeron spp.	Fleabane	Forb	Perennial
ERI^2	Eriogonum spp.	Wildbuckwheat	Forb	
EULA	Eurotia lanata	Winterfat	Half-shrub	Perennial
GACO	Gaura coccinea	Scarlet gaura	Forb	Perennial
GIAG	Gilia aggregata	Skyrocket gilia	Forb	Perennial
GRSP	Grayia spinosa	Spiny hopsage	Shrub	Perennial
GUSA	Gutierrezia sarothrae	Broom snakeweed	Half-shrub	Perennial
HAAC	Haplopappus acaulis	Stemless goldenweed	Forb	Perennial
JUOS	Juniperus osteosperma	Utah juniper	Tree	Perennial
JUSC	Juniperus scopulorum	Rockymountain juniper	Tree	Perennial
KOAM	Kochia americana	Greenmolly summercypress	Shrub	Perennial
KOCR	Koeleria cristata	June grass	Grass	Perennial
LARE	Lappula redowskii	Stickseed	Forb	Annual
LEAL	Lesquerella alpina	Alkaline bladderpod	Forb	Perennial
LEDE	Lepidium densiflorum	Prairie pepperweed	Forb	Annual
LELU	Lesquerella ludoviciana	Foothill bladderpod	Forb	Perennial
LEPU	Leptodactylon pungens	Granite gilia	Forb	Perennial
LERE	Lewisia rediviva	Bitterroot	Forb	Perennial
LILE	Linum lewisii	Blue flax	Forb	Perennial
LUPU	Lupinus Pusillus	Rusty lupine	Forb	Annual
MACA	Machaeranthera canescens	Hoary aster	Forb	Perennial
MAGL	Machaeranthera glabriuscula	Woodyaster	Half-shrub	Perennial
MAGR	Machaeranthera grindelodes	Woodyaster	Forb	Perennial
MAVE	Mamillaria vivipara	Pink pincushion cactus	Forb	Perennial
MELO	Mertenca longiflora	Small bluebells	Forb	Perennial
OECA	Oenothera caespitosa	Tufted evening primrose	Forb	Perennial
OPPO	Opuntia polyacantha	Plains pricklypear	Forb	Perennial
ORFA	Orobanche fasiculata	Tufted broomrape	Saprophyte	
ORHY	Oryzopsis hymenoides	Indian ricegrass	Grass	Perennial
OXLA	Oxytropis lambertii	Lambert loco	Forb	Perennial
PECL	Penstemon cleburnei	Larchleaf penstemon	Forb	Perennial
PEFR	Penstemon fremontii	Fremont penstemon	Forb	Perennial
PELA	Penstemon laricifolius	Larchleaf penstemon	Forb	Perennial
PEN	Penstemon spp.		Forb	Perennial
PHHO	Phlox hoodii	Hood's phlox	Forb	Perennial
PHLO	Phlox longifolia	Long-leaf phlox	Forb	Perennial
PLPA	Plantago patagonica	Wooly indianwheat	Forb	Annual
PLSP	Plantago spinescens	Spiny indianwheat	Forb	Annual
POFE	Poa fendleriana	Muttongrass	Grass	Perennial
POSE	Poa secunda	Sandberg bluegrass	Grass	Perennial
PSTE	Psoralea tenuiflora	Slimflower scurfpea	Forb	Annual
RHTR	Rhus trilobata	Skunkbush sumac	Shrub	Perennial
SAKA	Salsola kali	Russian thistle	Forb	Annual

TABLE II (continued)

Code	Genus-Species	Common Name	Life Form	Longevity
SED	Sedum spp.	Stonecrop	Forb	Perennial
SEN	Senecio spp.	Groundsel	Forb	
SIHY	Sitanion hystrix	Squirreltail bottlebrush	Grass	Perennial
SILI	Sisymbrium linifolium	Tumbleweed	Forb	Annual
SPCO	Sphaeralcea coccinea	Scarlet globemallow	Forb	Perennial
SPCR	Sporobolus cryptandrus	Sand dropseed	Grass	Perennial
STCO	Stipa comata	Needleandthread	Grass	Perennial
SYOC	Symphoricarpos occidentalis	Western snowberry	Shrub	Perennial
TECA	Tetradymia canescens	Gray horsebrush	Shrub	Perennial
TESP	Tetradymia spinosa	Spiny horsebrush	Shrub	Perennial
TOIN	Townsendia incana	Hoary townsendia	Forb	Perennial
TRI	Trifolium spp.	Clover	Forb	
TRDU	Tragopogon dubius	Salsify	Forb	Perennial
UMB	Umbelliferae spp.	Carrot spp.	Forb	
VIAM	Vicia americana	American vetch	Forb	Perennial
VINU	Viola nuttallii	Nuttall violet	Forb	Perennial
VIVA	Viola vallicola	Nuttall violet	Forb	Perennial
VUOC	Vulpia octoflora	Common sixweeksgrass	Grass	Annual
YUGL	Yucca glauca	Small soapweed	Forb	Perennial
ZYVE	Zygadenus venanosus	Death camas	Forb	Perennial

TABLE III. Phenological survey of all species for each exclosure and date.

	Page
Bud Kimball Exclosure	14
Cedar Mountain "	15
Cumberland #3 "	17
Demer "	19
Farson "	21
Horse Creek "	23
Mesa Antelope "	26
Owl Draw "	28
Red Wash #2 "	30
Shoshoni Ant. #7 "	32
Sweetwater "	33
Upper Gov't Draw "	35

TABLE III.

PHENOLOGICAL INVENTORY Study Area Bud Kimball 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	23 June		29 July		15 Aug.		20 Sept.															
1. AGSM	4.5	6.6	14.3	12.5	14.8	15.0	14.9	15.7														
2. ALTE	14.0	9.0	14.9	15.6	14.9	15.6	17.0	17.0														
3. ARTR	3.4	5.0	3.6	5.6	4.3	5.8	4.5	8.0														
4. BRTE	4.5	6.8	14.9	15.7	14.9	15.9	14.9	15.9														
5. CAS	14.3	9.5	14.8	15.3	14.9	15.9	17.0	17.0														
6. CRE	4.5	9.8	14.9	15.9	14.9	15.9	14.9	15.9														
7. CYMO	14.2	11.0	14.9	15.9	14.9	15.9	17.0	17.0														
8. DEPI	14.0	9.0	14.9	15.8	14.9	15.9	14.9	15.9														
9. ERPU	4.5	8.0	14.2	15.6	14.8	15.9	17.0	17.0														
10. LARE	14.0	9.2	14.9	15.6	14.9	15.6	14.9	15.9														
11. MATA	4.5	8.0	--	--	14.9	15.9	14.9	15.9														
12. OPPO	3.5	5.7	4.0	11.5	14.3	15.0	14.4	15.9														
13. PHHO	4.0	10.5	14.5	15.9	14.8	15.9	14.9	15.9														
14. PLSP	14.0	8.0	14.9	13.8	14.9	15.9	14.9	14.9														
15. POSE	4.7	7.5	14.9	15.9	14.9	15.9	14.9	15.9														
16. SIHY	4.7	7.0	14.7	15.9	14.9	15.9	14.9	15.9														
17. SPCO	4.0	5.5	14.3	15.7	14.9	15.9	14.9	15.9														
18. SPCR	4.5	6.5	14.3	15.3	14.9	15.9	14.9	15.9														
19. STCO	4.5	6.5	14.6	15.7	14.9	15.9	14.9	15.9														
20. LERE	4.0	9.5	14.9	15.9	14.9	15.9	14.9	15.9														
21. VIAM	--	--	14.3	15.9	14.9	15.9	17.0	17.0														
22. VIO	4.5	10.5	--	--	14.9	15.9	17.0	17.0														

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Cedar Mountain 1975 Type-site ARTR-AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	19 May		13 June		31 July																	
1. AGCR	3.2	--	4.4	6.7	14.1	11.3																
2. AGSP	3.3	--	4.4	6.6	14.1	11.5																
3. ARHO	--	--	3.7	10.0	14.2	9.9																
4. ARSP	3.5	5.2	3.6	5.3	14.2	15.9																
5. ARTR	2.3	--	3.3	5.2	4.1	5.6																
6. ASPU	3.5	6.0	3.7	13.1	14.3	15.9																
7. ATCO	2.6	--	3.3	5.2	4.5	11.0																
8. ATNU	3.5	5.1	3.6	9.7	14.2	11.3																
9. CAS	--	--	--	--	14.2	9.9																
10. CHVI	2.6	--	3.3	5.1	4.3	5.9																
11. EROU	--	--	3.8	9.0	14.2	13.8																
12. ERPU	2.5	--	3.5	--	4.0	5.3																
13. EULA	2.3	--		--	4.5	9.8																
14. HAAC	3.3	5.2	3.6	9.2	14.4	15.9																
15. KOAM	3.2	--	3.4	--	14.2	10.7																
16. OPPO	2.0	--	3.3	5.4	4.2	11.0																
17. ORHY	--	--	4.4	7.1	14.3	15.4																
18. PHHO	3.0	6.0	3.7	10.0	14.2	15.9																
19. PHLO	3.0	--	3.6	7.0	14.2	15.9																
20. POSE	3.3	--	4.5	8.0	14.9	15.9																
21. SIHY	3.4	--	4.4	7.1	14.1	11.5																
22. SPCO	--	--	3.6	5.3	14.1	10.2																

TABLE II (continued)

PHENOLOGICAL INVENTORY Study Area Cedar Mountain 1975 Type-site ARTR-AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	19 May		13 June		31 July																	
1. TESP	2.7	--	3.5	5.2	4.5	10.3																
2. TOIN	--	--	4.3	6.5	4.5	9.0																
3. VIVA	--	--	--	--	4.0	15.9																
4.																						
5.																						
6.																						
7.																						
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21.																						
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TABLE II (Continued)

PHENOLOGICAL INVENTORY Study Area Cumberland #3 1975 Type-site ARTR-AGSM,AGSP

SPECIES IDENTIFICATION		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
		12 June		26 June		30 July																	
1.	AGGL	3.4	--	--	--	14.9	15.9																
2.	AGSM	4.1	--	4.3	--	14.3	12.0																
3.	AGSP	4.2	5.1	4.5	5.3	14.3	15.8																
4.	AMAL	--	--	3.5	7.3	4.5	--																
5.	ANDI	3.5	--	4.0	12.0	14.6	15.9																
6.	ARHO	3.7	10.1	--	--	14.9	15.9																
7.	ARTR	3.3	--	3.4	5.1	4.1	5.7																
8.	ASCI	3.6	9.0	4.0	10.5	14.9	15.9																
9.	ASDI	3.7	10.5	4.2	15.9	14.2	15.9																
10.	AST	3.5	8.0	4.0	10.7	--	--																
11.	CANU	--	--	--	--	14.5	9.5																
12.	CAS	--	--	14.2	10.0	14.3	11.0																
13.	CHVI	3.4	--	3.5	5.3	5.1	5.9																
14.	COPA	3.5	--	4.0	--	14.3	15.9																
15.	CRE	--	--	4.0	9.7	14.9	15.9																
16.	ERMI	3.4	--	3.6	--	14.2	7.1																
17.	EROU	3.4	--	--	--	--	--																
18.	ERPU	--	--	--	--	14.7	15.9																
19.	ERSU	3.5	--	--	--	--	--																
20.	KOCR	4.1	--	--	--	--	--																
21.	MELO	3.4	7.5	--	--	--	--																
22.	OPPO	3.2	--	3.4	5.2	4.0	11.0																

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Cumberland #3 1975 Type-site ARTR-AGSM, AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	12 June		26 June		30 July																	
1. ORHY	4.1	--	--	--	--	--	--	--														
2. PELA	--	--	4.0	8.5	14.5	15.9																
3. PHHO	3.7	9.0	4.0	--	14.6	15.9																
4. PHLO	3.5	7.5	4.0	9.5	14.9	15.9																
5. POFE	4.4	5.2	4.5	5.8	14.7	15.8																
6. POSE	4.4	5.3	4.7	6.8	14.9	15.9																
7. SIHY	4.1	--	--	--	14.2	15.5																
8. SILI	--	--	14.2	10.3	14.8	15.9																
9. STCO	4.1	--	---	--	14.3	15.9																
10. TECA	3.4	--	3.6	--	4.2	6.8																
11. TRI	3.7	--	4.5	--	14.7	15.9																
12. UMB	--	--	4.5	15.3	--	--																
13. VIAM	--	--	4.0	6.7	14.7	15.9																
14. VIVA	3.4	--	4.0	--	14.5	15.9																
15. ZYG	3.6	8.0	--	--	14.9	15.9																
16.																						
17.																						
18.																						
19.																						
20.																						
21.																						
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Demer 1975 Type-site ARTR-AGSM , AGSP

SPECIES IDENTIFICATION		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
		31 Jan		28 Feb		25 Apr		28 May		10 Jun		25 Jun		15 Jul		29 Jul		15 Oct		14 Nov		29 Dec	
1.	AGSM	17.0	—	17.0	—	3.1	—	4.2	5.1	4.4	6.1	14.0	6.7	14.0	10.5	14.3	12.5	14.9	15.9	16.9	15.9	17.0	17.0
2.	AGSP	17.0	—	17.0	—	3.3	—	4.4	5.2	4.6	6.5	14.1	7.8	14.1	11.0	14.3	13.5	14.9	15.9	16.9	15.9	17.0	17.0
3.	ALTE	—	—	—	—	—	—	3.5	5.6	3.7	7.8	14.3	9.5	14.9	15.5	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0
4.	ARTR	14.8	15.9	14.8	15.9	3.1	—	3.3	—	3.5	—	3.5	5.1	3.6	5.5	4.1	5.6	14.5	13.5	14.7	15.9	14.8	15.9
5.	BOGR	17.0	—	17.0	—	1.0	—	3.2	6.5	4.1	7.1	4.3	7.5	4.5	9.0	4.6	10.5	14.9	15.9	17.0	17.0	17.0	17.0
6.	BRTE	14.9	15.9	14.9	15.9	4.0	—	4.5	5.5	4.7	6.8	14.2	10.3	14.8	15.5	14.9	15.5	14.9	15.9	16.7	15.9	16.9	15.9
7.	CHEN	—	—	—	—	—	—	3.5	—	—	—	—	—	14.1	5.7	14.7	13.0	14.9	15.9	14.9	15.9	14.9	15.9
8.	CIR	—	—	—	—	—	—	3.4	—	3.5	—	—	—	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0
9.	CYMO	—	—	—	—	3.5	5.6	3.5	7.0	3.8	10.4	14.5	15.8	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0
10.	DEGE	17.0	—	17.0	—	3.3	—	3.6	5.7	3.7	5.9	14.2	8.5	14.4	10.8	14.9	15.8	14.9	15.9	17.0	17.0	17.0	17.0
11.	LARE	14.9	15.9	14.9	15.9	14.9	15.9	3.5	6.3	3.7	6.7	4.5	9.0	14.1	11.5	14.9	15.7	14.9	15.9	14.9	15.9	14.9	15.9
12.	LEDE	—	—	—	—	—	—	—	—	3.7	10.2	4.5	11.5	14.9	12.0	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9
13.	LUP	—	—	—	—	—	—	—	—	3.6	6.1	4.5	7.5	4.8	11.0	14.8	15.9	17.0	17.0	17.0	17.0	17.0	17.0
14.	OPPO	14.8	15.9	14.8	15.9	2.5	—	3.3	5.2	3.4	5.5	3.5	6.1	3.5	11.5	4.0	12.5	14.7	15.9	14.7	15.9	17.0	17.0
15.	ORHY	17.0	—	17.0	—	3.1	—	4.4	5.1	4.5	6.1	—	—	14.1	12.0	—	—	14.9	15.9	16.9	15.9	17.0	17.0
16.	PLSP	14.9	15.9	14.9	15.9	3.0	—	3.5	5.1	3.7	5.5	4.5	10.0	14.5	10.5	14.9	13.8	14.9	15.9	14.9	15.9	14.9	15.9
17.	POSE	17.0	—	17.0	—	3.7	—	4.5	6.8	4.7	6.9	14.2	10.5	14.3	15.9	14.7	15.9	14.9	15.9	16.6	15.9	17.0	17.0
18.	SAKA	14.7	15.9	14.9	15.9	14.9	15.9	—	—	—	—	—	—	—	—	—	—	14.9	15.9	14.9	15.9	14.9	15.9
19.	SIHY	17.0	—	17.0	—	3.2	—	—	—	4.5	6.1	14.0	10.0	14.1	12.0	14.4	15.0	14.9	15.9	16.8	15.9	17.0	17.0
20.	SILI	—	—	—	—	—	—	3.5	—	3.7	10.3	14.2	11.0	14.2	11.5	14.9	15.8	14.9	15.9	14.9	15.9	14.9	15.9
21.	SPCO	—	—	—	—	—	—	—	—	3.5	—	—	—	—	—	—	—	17.0	17.0	17.0	17.0	17.0	17.0
22.	STCO	17.0	—	17.0	—	3.1	—	4.4	5.1	—	—	—	—	14.0	11.5	14.2	15.5	14.9	15.9	16.9	15.9	17.0	17.0

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Demer 1975 Type-site ARTR-AGSM , AGSP

SPECIES IDENTIFICATION	31 Jan		28 Feb		25 Apr		28 May		10 Jun		25 Jun		15 Jul		29 Jul		15 Oct		14 Nov		29 Dec	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1. VUOC	14.9	15.9	14.9	15.9	14.9	15.9	--	--	4.5	6.3	14.2	10.0	--	--	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9
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TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Farson 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
		6 Feb		29 Mar		26 Apr		19 May		30 May		11 Jun		25 Jun		4 Aug		17 Oct		26 Nov			
1.	AGSM	17.0	--	17.0	--	1.2	--	2.8	--	3.3	--	4.0	--	4.2	--	14.3	--	14.9	--	17.0	--		
2.	ALTE	--	--	--	--	--	--	--	--	--	--	--	--	4.5	8.5	14.9	15.9	17.0	17.0	17.0	17.0		
3.	ARHO	17.0	--	17.0	--	1.5	--	3.2	5.0	3.3	5.2	3.4	5.4	3.5	6.0	14.2	--	17.0	17.0	17.0	17.0		
4.	$ARHO_2$	14.9	15.9	14.9	15.9	14.9	15.9	3.0	--	--	--	--	--	--	--	--	--	--	--	--	--		
5.	ARTR	14.8	15.9	14.9	15.9	14.8	15.9	2.2	--	3.1	--	3.3	--	3.4	5.1	4.1	5.7	14.0	10.5	14.8	15.9		
6.	ASPU	17.0	--	17.0	--	17.0	--	3.2	5.	3.3	6.4	3.5	8.7	4.0	15.9	14.3	15.9	14.9	15.9	17.0	17.0		
7.	ASSP	17.0	--	17.0	--	17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
8.	ATCO	17.0	--	17.0	--	1.5	--	2.5	--	3.2	5.1	3.4	6.7	3.5	8.5	4.5	11.5	14.2	13.0	14.8	15.9		
9.	CAEL	17.0	--	17.0	--	17.0	--	--	--	2.9	--	--	--	--	--	--	--	14.9	15.9	17.0	17.0		
10.	CHVI	17.0	--	17.0	--	17.0	--	2.5	--	3.2	--	3.4	--	3.5	5.5	4.2	6.2	14.9	15.9	14.9	15.9		
11.	CYMO	--	--	--	--	--	--	--	--	--	--	3.5	5.2	--	--	14.9	15.9	17.0	17.0	17.0	17.0		
12.	ERCL	17.0	--	17.0	--	17.0	--	3.0	--	3.2	--	--	--	--	--	--	--	--	--	--	--		
13.	EROV	17.0	--	17.0	--	17.0	--	3.0	--	3.3	--	3.5	7.0	4.0	8.5	14.2	15.9	14.9	15.9	17.0	17.0		
14.	EULA	17.0	--	17.0	--	17.0	--	3.1	--	3.4	--	3.5	5.3	3.6	5.8	14.2	10.3	14.0	12.0	14.9	15.9		
15.	GACO	--	--	--	--	--	--	3.3	--	3.4	--	--	--	--	--	--	--	14.9	15.9	17.0	17.0		
16.	GRSP	17.0	--	17.0	--	17.0	--	2.6	--	3.4	5.2	3.5	9.5	3.7	9.8	4.5	15.4	14.9	15.9	14.9	15.9		
17.	HAAC	17.0	--	17.0	--	17.0	--	3.0	--	3.2	5.0	3.4	5.9	3.7	9.5	14.3	15.9	14.9	15.9	17.0	17.0		
18.	KOCR	--	--	--	--	--	--	2.8	--	3.2	--	--	--	--	--	--	--	14.9	15.9	17.0	17.0		
19.	LEPU	--	--	--	--	--	--	--	--	3.2	--	3.4	5.1	--	--	--	--	14.9	15.9	17.0	17.0		
20.	OPPO	14.8	15.9	14.8	15.9	14.8	15.9	3.2	--	3.3	--	3.4	5.1	3.5	5.5	4.2	11.5	14.6	15.9	14.7	15.9		
21.	ORHY	17.0	--	17.0	--	17.0	--	2.8	--	3.1	--	3.9	--	4.4	6.0	14.3	15.5	14.9	15.9	17.0	17.0		
22.	PECL	17.0	--	17.0	--	17.0	--	3.0	--	3.3	5.2	3.5	7.5	4.0	9.2	14.2	15.9	14.9	15.9	17.0	17.0		

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Farson 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	6 Feb		29 Mar		26 Apr		19 May		30 May		11 Jun		25 Jun		4 Aug		17 Oct		26 Nov			
1. PHHO	17.0	--	17.0	--	1.2	--	3.5	6.2	3.5	7.3	3.6	8.7	4.0	9.5	14.3	15.9	14.9	15.9	17.0	17.0		
2. POSE	17.0	--	17.0	--	17.0	--	--	--	--	--	4.2	--	--	--	14.9	15.9	17.0	17.0	17.0	17.0		
3. SIHY	17.0	--	17.0	--	17.0	--	3.1	--	3.2	--	4.2	--	4.5	6.1	14.3	13.9	14.9	15.9	17.0	17.0		
4. SILI	14.9	15.9	14.9	15.9	14.9	15.9	--	--	3.4	--	--	--	14.0	10.2	14.7	15.9	14.9	15.9	14.9	15.9		
5. SPCO	17.0	--	17.0	--	17.0	--	2.5	--	3.2	--	3.4	--	3.7	6.3	14.0	15.9	14.9	15.9	17.0	17.0		
6. STCO	17.0	--	17.0	--	17.0	--	2.8	--	3.2	--	4.0	--	4.4	5.9	14.5	15.9	14.9	15.9	17.0	17.0		
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TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Horse Creek 1975 Type-site ARTR, ARNO, AGSM, AGSP

SPECIES IDENTIFICATION	24 Jan		12 Mar		28 May		9 Jun		24 Jun		15 Jul		29 Jul		20 Sep		15 Nov		30 Dec			
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1. AGSM	17.0	--	17.0	--	4.3	5.0	4.3	5.1	4.4	6.4	14.1	9.3	14.6	13.0	14.9	15.0	17.0	17.0	17.0	17.0		
2. AGSP	17.0	--	17.0	--	4.2	5.0	4.4	6.3	4.6	6.5	14.2	10.3	14.7	15.7	14.9	15.9	17.0	17.0	17.0	17.0		
3. AITE	--	--	--	--	--	--	4.2	8.5	4.9	9.3	14.9	15.8	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0		
4. ARLO	17.0	--	17.0	--	3.3	--	4.0	--	4.2	--	4.5	8.5	14.2	15.5	14.9	15.9	17.0	17.0	17.0	17.0		
5. ARNO	14.7	15.9	14.7	15.9	3.1	--	3.5	--	3.5	5.2	3.7	5.6	4.2	5.7	4.6	8.2	14.7	15.9	14.8	15.9		
6. ARTR	14.8	15.9	14.8	15.9	3.2	--	3.4	--	3.4	5.1	3.7	5.5	4.0	5.6	4.5	8.0	14.7	15.9	14.8	15.9		
7. ARTR	14.8	15.9	14.8	15.9	3.2	--	3.4	--	3.4	5.1	3.7	5.7	4.0	5.6	4.5	8.0	14.8	15.9	14.8	15.9		
8. ARTR-AGSP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
9. ASPU	17.0	--	17.0	--	3.5	--	3.5	--	--	--	4.8	15.8	14.8	15.9	--	--	17.0	17.0	17.0	17.0		
10. BRCO	14.9	15.9	14.9	15.9	4.5	6.0	--	--	--	--	14.4	13.5	14.9	15.2	14.9	15.9	17.0	17.0	17.0	17.0		
11. BRTE	14.9	15.9	14.9	15.9	--	--	--	--	4.7	--	14.8	15.5	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9		
12. BRTE	14.9	15.9	14.9	15.9	4.5	6.0	4.6	6.8	14.1	6.9	14.8	15.5	17.9	15.4	14.9	15.9	14.9	15.9	14.9	15.9		
13. CAAN	--	--	--	--	3.5	6.2	3.6	8.0	4.0	9.0	14.3	15.2	14.9	15.8	14.9	15.9	17.0	17.0	17.0	17.0		
14. CAAN	17.0	--	17.0	--	3.5	6.2	3.6	9.0	--	--	14.3	15.2	14.9	15.8	14.9	15.9	17.0	17.0	17.0	17.0		
15. CANU	17.0	--	17.0	--	3.3	--	3.5	5.2	4.0	5.8	--	--	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0		
16. CHEN	--	--	--	--	--	--	3.5	5.3	3.5	5.7	14.7	11.0	14.4	15.3	14.9	15.9	14.9	15.9	14.9	15.9		
17. CIR	17.0	--	17.0	--	3.4	--	3.5	5.7	--	--	14.9	15.9	16.3	15.9	16.9	15.9	17.0	17.0	17.0	17.0		
18. COPA	--	--	--	--	3.5	--	3.5	5.3	4.0	6.1	17.0	--	--	--	17.0	17.0	17.0	17.0	17.0	17.0		
19. CRBR	17.0	--	17.0	--	3.5	6.2	3.7	7.5	4.0	8.0	14.8	9.8	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
20. CRE	17.0	--	17.0	--	--	--	3.5	5.2	3.7	6.2	--	--	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9		
21. CRFL	17.0	--	17.0	--	3.5	6.1	3.7	7.6	4.5	9.5	14.9	15.5	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
22. CYMO	--	--	--	--	3.5	5.9	3.7	10.5	14.5	15.7	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0		

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Horse Creek 1975 Type-site ARTR, ARNO, AGSM, AGSP

SPECIES IDENTIFICATION		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
		24 Jan		12 Mar		28 May		9 Jun		21 Jun		15 Jul		29 Jul		20 Sep		15 Nov		30 Dec			
1.	ERPU	17.0	--	17.0	--	3.5	--	--	--	4.0	7.5	14.2	15.5	14.6	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
2.	EULA	17.0	--	17.0	--	3.2	--	3.5	5.4	3.8	5.5	3.8	7.0	14.1	10.0	14.2	15.2	14.8	15.9	17.0	17.0		
3.	EULA	17.0	--	17.0	--	3.2	--	3.5	5.4	3.6	5.5	3.8	7.0	14.1	10.0	14.2	15.2	14.8	15.8	17.0	17.0		
4.	GALO	17.0	--	17.0	--	3.3	--	3.5	--	3.6	7.0	4.5	11.0	14.2	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
5.	GUSA	17.0	--	17.0	--	3.3	--	3.6	--	3.6	--	3.7	5.3	4.0	5.7	4.8	13.5	17.0	17.0	17.0	17.0		
6.	GUSA	17.0	--	17.0	--	3.3	--	3.4	--	3.6	--	3.7	5.5	4.0	5.7	4.8	13.5	17.0	17.0	17.0	17.0		
7.	HAAC	17.0	--	17.0	--	3.5	6.1	3.6	8.0	4.0	9.7	14.3	15.9	14.6	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
8.	LARE	--	--	--	--	--	--	3.6	6.7	4.5	9.0	17.9	12.0	14.9	15.5	14.9	15.9	14.9	15.9	14.9	15.9		
9.	LERE	--	--	--	--	--	--	--	--	4.5	6.5	--	--	14.9	15.6	17.9	15.9	17.0	17.0	17.0	17.0		
10.	MAGH	17.0	--	17.0	--	--	--	--	--	--	--	3.8	5.9	--	--	14.9	15.9	17.0	17.0	17.0	17.0		
11.	OPPO	14.8	15.9	14.8	15.9	3.3	5.1	3.4	5.4	3.5	6.1	4.0	11.0	4.3	11.5	14.4	15.8	14.7	15.7	14.8	15.9		
12.	OPPO	14.8	15.9	14.8	15.9	3.3	5.1	3.4	5.4	3.5	6.1	4.0	11.0	4.3	11.5	14.4	15.8	14.7	15.9	14.8	15.9		
13.	ORHY	17.0	--	17.0	--	--	--	--	--	4.5	6.4	14.3	11.4	14.5	15.3	14.9	15.9	17.0	17.0	17.0	17.0		
14.	PEN	--	--	--	--	--	--	3.5	7.1	4.0	7.5	4.1	8.0	--	--	17.0	17.0	17.0	17.0	17.0	17.0		
15.	PHHO	17.0	--	17.0	--	3.5	6.5	3.6	10.0	4.0	10.5	14.5	15.9	14.8	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
16.	POSE	17.0	--	1.2	--	--	--	4.5	--	--	--	--	--	14.9	15.9	14.9	15.9	16.6	15.9	17.0	17.0		
17.	SAKA	14.9	15.9	14.9	15.9	--	--	--	--	3.4	--	--	--	4.2	5.7	14.9	15.9	14.9	15.9	14.9	15.9		
18.	SIHY	17.0	--	17.0	--	--	--	--	--	4.7	6.6	14.3	15.3	14.7	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
19.	SIHY	17.0	--	17.0	--	--	--	--	--	4.7	6.6	14.3	15.3	14.7	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
20.	SILI	--	--	--	--	--	--	3.7	10.2	4.5	11.0	14.9	15.4	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9		
21.	SPCO	17.0	--	17.0	--	3.4	5.0	3.6	5.6	4.0	6.5	14.2	11.0	14.3	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
22.	PHHO	17.0	--	17.0	--	3.5	6.5	3.6	10.0	4.0	10.5	14.5	15.9	14.8	15.9	14.9	15.9	17.0	17.0	17.0	17.0		

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Horse Creek 1975 Type-site ARTR, ARNO, AGSM, AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	24 Jan		12 Mar		28 Mar		9 Jun		24 Jun		15 Jul		29 Jul		20 Sep		15 Nov		30 Dec			
1. STCO	17.0	--	17.0	--	--	--	--	--	--	--	--	--	14.7	15.6	14.9	15.9	17.0	17.0	17.0	17.0		
2. TROU	17.0	--	17.0	--	3.3	--	--	--	4.0	6.1	14.5	15.2	14.8	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
3. VINU	17.0	--	17.0	--	3.5	6.1	3.6	--	--	--	--	--	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0		
4. VIVA	17.0	--	17.0	--	3.5	6.5	3.6	--	--	--	--	--	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0		
5. YUGL	14.5	--	17.0	--	3.5	--	3.5	--	3.6	--	3.8	--	3.9	--	14.5	--	--	--	14.8	--		
6. ZYG	17.0	--	17.0	--	3.5	7.5	--	--	--	--	14.9	15.9	14.9	15.9	17.0	17.0	17.0	17.0	17.0	17.0		
7.																						
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21.																						
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Mesa Antelope 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	12 Jun		25 Jun		4 Aug		17 Oct															
1. AGSM	3.8	--	4.2	--	14.4	13.0	14.9	15.9														
2. ANRO	--	--	3.5	--	--	--	--	--														
3. ARHO	3.4	--	--	--	--	--	14.9	15.9														
4. ARTR	3.3	--	3.4	5.1	4.2	5.7	14.0	10.5														
5. ASPU	3.6	7.0	--	--	--	--	14.9	15.9														
6. ASSP	3.6	7.0	--	--	--	--	14.9	15.9														
7. ATNU	--	--	--	--	--	--	--	--														
8. CAEL	--	--	4.5	--	--	--	--	--														
9. CHVI	3.3	--	3.4	--	4.2	6.3	14.9	15.9														
10. ERCA	3.6	7.6	4.0	8.5	14.3	15.9	14.9	15.9														
11. EROU	3.6	7.3	4.0	8.3	14.3	15.9	14.9	15.9														
12. EULA	3.3	--	3.7	6.1	14.2	10.0	14.0	12.0														
13. HAAC	3.5	6.2	4.0	9.5	14.3	15.9	14.9	15.9														
14. LEPU	3.4	5.1	3.7	6.2	14.1	12.0	14.7	15.9														
15. MACA	--	--	4.0	9.0	14.2	9.7	14.9	15.5														
16. OPPO	3.2	--	3.4	5.5	4.2	11.5	14.7	15.9														
17. ORHY	4.2	6.1	4.4	6.2	14.4	15.6	14.9	15.9														
18. PELA	--	--	--	--	--	--	14.9	15.9														
19. PHHO	3.6	7.3	4.0	9.5	14.5	15.9	14.9	15.9														
20. POSE	4.3	6.5	4.4	6.9	14.8	15.9	14.9	15.9														
21. SIHY	4.1	--	4.4	6.3	14.4	15.2	14.9	15.9														
22. SILI	--	--	14.0	10.1	--	--	14.9	15.9														

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Mesa Antelope 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	12 Jun		25 Jun		4 Aug		17 Oct															
1. STCO	4.2	--	4.3	--	14.2	15.9	14.9	15.9														
2. TRI	3.6	9.0	4.0	15.7	14.1	15.9	14.7	15.9														
3.																						
4.																						
5.																						
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20.																						
21.																						
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Owl Draw 1975 Type-site ARTR, ARNO, AGSM, AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	6 Jun		14 Jul		28 Jul		20 Sep															
1. AGSM	4.1	--	14.1	8.0	14.4	15.3	14.9	15.9														
2. AGSP	4.2	5.2	14.2	9.0	14.5	15.0	14.9	15.9														
3. ALTE	--	--	--	--	14.1	6.5	17.0	17.0														
4. ARHO	3.9	5.2	4.0	7.5	14.7	11.5	14.9	15.9														
5. ARHO$_2$	--	--	14.5	11.2	14.9	15.5	14.9	15.9														
6. ARNO	3.4	--	3.7	5.6	4.0	5.8	4.8	8.2														
7. ARNU	3.4	--	14.5	--	--	--	--	--														
8. ARTR	3.3	--	3.7	5.5	4.0	5.6	4.8	8.0														
9. ASPU	3.6	10.8	14.0	12.9	14.8	15.9	14.9	15.9														
10. AST	3.6	7.5	4.7	11.0	4.5	11.5	14.9	15.9														
11. AST	3.6	7.3	4.8	15.5	--	--	14.9	15.9														
12. AST	3.5	7.0	14.2	15.9	14.6	15.9	14.9	15.9														
13. BASA	3.5	--	14.3	15.9	14.8	15.9	14.5	15.9														
14. CAMI	--	--	14.7	15.1	14.9	15.6	14.9	15.9														
15. CANU	3.4	--	14.5	8.0	14.8	10.2	17.0	17.0														
16. CAS	3.6	8.0	14.2	10.5	14.5	15.2	14.9	15.9														
17. CHVI	3.4	--	3.7	--	4.2	5.5	4.8	13.5														
18. CRBR	--	--	3.7	10.2	4.5	--	14.7	15.4														
19. CRE	3.5	5.2	14.1	15.1	14.7	15.9	14.9	15.9														
20. CYMO	3.6	8.5	14.9	15.9	14.9	15.9	17.0	17.0														
21. ERPU	3.6	7.5	4.8	9.8	14.2	15.9	14.9	15.9														
22. EULA	--	--	14.2	10.0	14.1	10.5	14.3	15.2														

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Owl Draw 1975 Type-site ARTR, ARNO, AGSM, AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	6 Jun		14 Jul		28 Jul		20 Sep															
1. HAAC	3.6	5.6	14.0	15.9	14.2	15.9	14.9	15.9														
2. JUOS	3.2	--	3.7	10.7	3.8	11.5	--	--														
3. JUSC	3.2	--	3.7	10.7	--	--	--	--														
4. KOCR	4.4	--	14.2	10.5	14.4	15.7	14.9	15.9														
5. LERE	--	--	14.9	9.9	14.9	15.9	17.0	17.0														
6. LILE	3.6	6.5	14.3	10.5	14.6	15.5	14.9	15.9														
7. MAGR	3.6	7.0	--	--	--	--	14.9	15.9														
8. MAVI	--	--	3.7	10.2	4.5	--	14.7	15.9														
9. OPPO	3.4	5.1	3.7	--	--	--	14.5	15.8														
10. ORHY	4.3	--	14.2	11.5	14.3	15.2	14.9	15.9														
11. PEN	--	--	4.8	10.5	14.9	15.9	17.0	17.0														
12. POFE	4.4	6.9	14.7	15.9	14.8	15.9	14.9	15.9														
13. POSE	4.5	6.9	14.8	15.9	14.9	15.9	14.9	15.9														
14. PHHO	3.5	9.5	4.2	15.2	14.9	15.5	14.9	15.9														
15. SED	--	--	14.0	10.2	14.0	15.2	14.9	15.9														
16. SEN	3.6	6.2	--	--	--	--	--	--														
17. STCO	4.3	--	14.2	11.0	14.4	15.9	14.9	15.9														
18. TRDU	--	--	14.3	15.5	14.5	15.9	14.9	15.9														
19. TRI	3.5	--	14.4	15.9	14.9	15.9	17.0	17.0														
20. VIAM	3.5	6.0	14.2	15.9	14.3	15.9	14.9	15.9														
21.																						
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Red Wash #2 1975 Type-site ARTR-AGSM, AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	13 Jun		26 Jun		31 Jul																	
1. AGSM	4.0	—	4.2	6.2	14.2	11.5																
2. AGSP	4.3	5.1	4.5	6.3	—	—																
3. ALTE	3.6	7.0	—	—	14.9	15.7																
4. ARA	—	—	14.2	10.7	—	—																
5. ARCO	—	—	4.0	8.5	—	—																
6. ARHO	3.4	5.6	3.7	5.9	14.2	10.0																
7. ARTR	3.3	—	3.4	5.1	4.2	5.7																
8. ASDI	3.4	5.4	3.5	5.8	4.5	18.9																
9. ASMO	—	—	—	—	—	—																
10. ASPU	3.6	10.1	4.0	10.5	14.8	15.9																
11. CHDO	3.4	—	3.8	5.8	4.7	15.9																
12. CHNA	3.3	—	3.4	5.2	—	—																
13. CHUT	3.4	—	3.4	—	4.8	5.8																
14. CREL	3.3	5.7	4.0	8.0	14.7	15.9																
15. DEPI	—	—	—	—	—	—																
16. ERAS	3.6	8.0	14.2	10.5	14.8	15.9																
17. EREL	—	—	4.0	8.0	—	—																
18. ERMI	—	—	3.6	—	—	—																
19. EROU	3.6	5.9	4.0	7.5	14.2	15.9																
20. EULA	3.4	—	3.5	5.1	4.8	—																
21. GIAG	—	—	3.5	5.2	—	—																
22. GRSP	3.3	—	3.5	5.8	4.5	15.5																

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Red Wash #2 1975 Type-site ARTR-AGSM, AGSP

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	13 Jun		26 Jun		31 Jul																	
1. HAAC	—	—	4.0	9.0	14.2	15.9																
2. LEPU	3.4	—	3.7	6.0	14.7	15.5																
3. MALA	3.5	5.5	—	—	—	—																
4. OPPO	3.4	5.0	3.4	5.3	4.3	11.5																
5. ORFA	—	—	—	—	—	—																
6. ORHY	4.0	—	4.5	6.3	4.3	15.7																
7. PEN	3.5	5.8	4.0	7.7	14.2	11.0																
8. PHHO	3.5	9.5	4.0	15.2	14.6	15.9																
9. POSE	—	—	—	—	14.9	15.9																
10. SIHY	—	—	—	—	4.4	15.3																
11. SILI	3.6	7.0	14.0	9.0	14.9	15.9																
12. STCO	4.0	—	4.4	—	14.3	15.8																
13. TECA	3.4	—	3.6	5.4	4.3	7.2																
14.																						
15.																						
16.																						
17.																						
18.																						
19.																						
20.																						
21.																						
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Shoshoni Ant. #7 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	23 Jan		27 Feb		12 Apr		5 Jun		24 Jun		14 Jul		29 Jul		25 Oct		15 Nov		30 Dec			
1. AGSM	17.0	17.0	17.0	17.0	1.7	--	4.3	5.1	4.5	5.3	14.1	7.5	14.3	12.5	14.9	13.9	17.0	--	17.0	--		
2. ALTE	17.0	17.0	17.0	17.0	--	--	3.5	5.8	14.0	9.2	14.9	15.9	14.9	15.9	17.0	17.0	17.0	--	17.0			
3. ARTR	14.7	15.9	14.8	15.9	14.8	15.9	3.3	--	3.4	5.1	3.7	5.5	4.0	5.7	14.2	10.5	14.8	15.9	14.8	15.9		
4. ASPU	17.0	17.0	17.0	17.0	2.0	--	3.7	10.7	--	--	14.2	15.6	14.8	15.9	14.9	15.9	17.0	--	17.0	--		
5. BOGR	17.0	17.0	17.0	17.0	17.0	17.0	4.2	--	4.5	5.7	4.6	7.2	14.0	10.5	14.8	13.0	17.0	--	17.0	--		
6. BRTE	14.9	15.9	14.9	15.9	14.9	15.9	4.6	6.5	4.6	6.8	14.9	15.7	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9		
7. CYMO	--	--	--	--	--	--	3.7	9.5	14.5	15.6	14.9	15.9	14.9	15.9	14.9	15.9	17.0	--	17.0	--		
8. DEPI	--	--	--	--	--	--	--	--	--	--	14.9	15.7	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9		
9. ERPU	17.0	17.0	17.0	17.0	--	--	3.8	--	14.0	7.0	14.3	10.2	14.4	15.6	14.9	15.9	17.0	--	17.0	--		
10. LEDE	--	--	--	--	--	--	--	--	4.0	10.2	14.5	11.0	14.9	15.7	14.9	15.9	14.9	15.9	14.9	15.9		
11. LUPU	--	--	--	--	--	--	3.4	5.3	3.7	7.5	14.6	11.3	14.9	15.9	17.0	17.0	17.0	--	17.0	--		
12. MALA	--	--	--	--	--	--	4.0	--	4.0	7.0	--	--	--	--	14.9	15.9	14.9	15.9	17.0	--		
13. OPPO	14.8	15.9	14.8	15.9	14.9	15.9	3.4	5.0	3.5	5.6	3.7	10.2	4.2	11.7	14.6	15.9	14.7	15.9	14.8	15.9		
14. ORHY	17.0	17.0	17.0	17.0	2.1	--	4.2	--	4.5	5.3	14.2	12.2	14.3	15.3	14.9	15.9	17.0	--	17.0	--		
15. PHHO	17.0	17.0	17.0	17.0	1.7	--	3.6	9.8	4.0	11.5	4.2	15.9	14.6	15.9	14.9	15.9	17.0	--	17.0	--		
16. PLPA	14.9	15.9	14.9	15.9	14.9	15.9	--	--	4.0	7.7	14.3	9.8	14.9	15.3	14.9	15.9	14.9	15.9	14.9	15.9		
17. POSE	17.0	17.0	17.0	17.0	2.4	--	4.5	6.6	4.7	--	14.8	15.9	14.9	15.9	14.9	15.9	17.0	--	17.0	--		
18. SIHY	17.0	17.0	17.0	17.0	--	--	4.4	6.0	4.5	7.2	14.2	13.5	14.4	13.2	14.9	15.9	17.0	--	17.0	--		
19. SILI	--	--	--	--	--	--	3.6	10.2	14.0	11.0	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9	14.9	15.9		
20. SPCO	17.0	17.0	17.0	17.0	--	--	3.5	5.0	4.0	6.7	4.5	10.5	14.0	15.9	14.9	15.9	17.0	--	17.0	--		
21. STCO	17.0	17.0	17.0	17.0	2.1	--	3.9	--	4.5	6.2	14.1	10.5	14.3	15.5	14.9	15.9	17.0	--	17.0	--		
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Sweetwater 1975 Type-site ARTR, ARNO, AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	25 Jan		1 Mar		28 Mar		24 May		11 Jun		22 Jun		30 Jul		25 Oct							
1. AGSM	17.0	--	17.0	--	17.0	--	3.8	--	4.1	--	4.4	6.4	14.3	15.2	14.9	15.9						
2. ALTE	--	--	--	--	--	--	--	--	3.6	7.1	4.0	9.0	14.9	15.8	17.0	17.0						
3. ARFR	17.0	--	17.0	--	17.0	--	3.3	--	3.5	5.1	3.2	5.4	4.2	5.8	14.9	15.9						
4. ARHO	17.0	--	17.0	--	17.0	--	3.5	5.2	3.5	5.4	3.3	7.5	14.3	11.0	14.4	15.9						
5. ARHO$_2$	14.9	15.9	14.9	15.9	14.9	15.9	3.6	7.5	--	--	--	--	--	--	--	--						
6. ARNO	14.2	15.9	14.8	15.9	14.8	15.9	3.1	--	3.1	--	3.4	5.2	4.1	5.7	14.2	15.2						
7. ARTR	14.8	15.9	14.8	15.9	14.8	15.9	3.2	--	3.3	--	3.4	5.1	4.0	5.6	14.0	15.0						
8. ASDI	--	--	--	--	--	--	--	--	--	--	--	--	4.5	10.5	14.9	15.9						
9. ASPU	17.0	--	17.0	--	17.0	--	3.5	5.2	3.6	6.9	--	--	--	--	14.9	15.9						
10. ASSP	17.0	--	17.0	--	17.0	--	3.5	5.1	3.6	5.8	4.0	7.5	14.0	15.9	14.9	15.9						
11. AST	17.0	--	17.0	--	17.0	--	--	--	--	--	--	--	--	--	17.0	17.0						
12. CAEL	17.0	--	17.0	--	17.0	--	3.8	--	4.4	--	4.6	--	14.2	15.9	14.9	15.9						
13. CAFI	17.0	--	17.0	--	17.0	--	3.8	--	4.4	6.5	4.4	--	14.0	15.9	14.9	15.9						
14. CANU	17.0	--	17.0	--	17.0	--	3.4	--	--	--	--	--	--	--	14.9	15.9						
15. CHDO	17.0	--	17.0	--	17.0	--	3.4	--	3.5	5.3	4.0	9.0	14.3	15.9	14.9	15.9						
16. CHNA	17.0	--	17.0	--	17.0	--	3.2	--	3.3	--	3.4	--	4.0	5.7	14.7	15.3						
17. CHVI	17.0	--	17.0	--	17.0	--	3.3	--	3.4	--	3.6	--	4.0	3.8	14.9	15.9						
18. COPA	17.0	--	17.0	--	17.0	--	3.5	5.7	3.6	6.8	4.0	8.5	4.8	15.9	14.9	15.9						
19. CRBR	17.0	--	1.0	--	--	--	3.3	--	3.5	6.5	4.0	7.0	14.7	15.9	14.9	15.9						
20. CRFL	17.0	--	1.0	--	--	--	3.3	--	3.5	6.5	4.0	8.5	14.3	15.9	14.9	15.9						
21. CYMO	--	--	--	--	--	--	3.4	--	3.7	11.0	4.0	15.7	14.9	15.9	12.0	17.0						
22. DEGE	17.0	--	17.0	--	17.0	--	3.3	--	3.6	5.8	4.7	8.0	14.9	15.7	17.0	17.0						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Sweetwater 1975 Type-site ARTR, ARNO, AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	25 Jan		1 Mar		28 Mar		24 May		11 Jun		25 Jun		30 Jul		25 Oct							
1. ERLA	17.0	17.0	--	17.0	17.0	--	3.5	--	3.2	7.5	--	--	--	--	--	--						
2. EROU	17.0	--	17.0	--	17.0	--	3.5	6.2	3.7	7.3	4.0	9.5	14.5	15.9	14.9	15.9						
3. ERPU	17.0	--	17.0	--	17.0	--	--	--	3.5	--	--	--	14.2	15.9	14.9	15.9						
4. KOCR	17.0	--	17.0	--	17.0	--	4.1	5.2	4.4	6.8	14.1	6.9	14.3	15.8	14.9	15.9						
5. LEPL	17.0	--	17.0	--	17.0	--	--	--	3.6	6.3	4.0	8.0	14.2	15.3	14.9	15.9						
6. MAGR	--	--	--	--	--	--	--	--	--	--	--	--	14.0	10.8	14.9	15.9						
7. OELA	--	--	--	--	--	--	--	--	--	--	4.0	8.5	--	--	17.0	17.0						
8. OPPO	14.8	15.9	14.8	15.9	14.8	15.9	3.2	--	3.4	5.1	3.5	5.7	4.0	11.5	10.8	15.9						
9. ORFA	17.0	--	17.0	--	17.0	--	--	--	--	--	3.5	5.8	--	--	17.0	17.0						
10. OZHY	17.0	--	17.0	--	17.0	--	3.8	--	4.1	--	4.6	6.4	14.3	15.9	14.9	15.9						
11. OZLA	17.0	--	17.0	--	17.0	--	3.5	5.3	--	--	4.2	9.3	14.0	15.9	17.0	17.0						
12. PEER	17.0	--	17.0	--	17.0	--	3.4	--	3.6	5.5	4.0	2.2	14.3	11.0	14.9	15.9						
13. PHHO	17.0	--	17.0	--	17.0	--	3.5	7.8	3.6	4.2	4.0	10.5	14.5	15.9	14.9	15.9						
14. POSE	17.0	--	17.0	--	17.0	--	--	--	--	--	--	--	--	--	17.0	17.0						
15. PSTE	17.0	--	17.0	--	17.0	--	--	--	3.5	--	3.7	--	14.0	--	17.0	--						
16. SPCO	17.0	--	17.0	--	17.0	--	3.4	--	3.6	5.3	4.0	6.2	--	--	17.0	17.0						
17. STCO	17.0	--	17.0	--	17.0	--	3.8	--	4.4	--	4.6	6.3	14.5	15.8	14.5	15.9						
18. TECA	17.0	--	17.0	--	17.0	--	3.3	--	3.4	5.1	3.5	5.3	4.0	7.2	14.9	15.9						
19. TOIN	17.0	--	17.0	--	17.0	--	3.3	--	3.6	7.5	4.0	9.0	4.8	9.8	14.9	15.9						
20. VIVA	17.0	--	17.0	--	17.0	--	3.5	7.3	3.2	--	4.0	--	14.2	--	17.0	--						
21. ZYDE	17.0	--	17.0	--	17.0	--	3.6	5.8	3.1	9.5	14.2	10.5	14.5	15.9	17.0	17.0						
22.																						

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Upper Gov't Draw 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	5 Jun		24 Jun		30 Jul		26 Oct															
1. AGSM	4.2	5.1	4.5	6.3	14.3	12.0	14.9	15.9														
2. ALTE	3.6	5.8	4.5	8.5	14.9	15.9	17.0	17.0														
3. ARLI	3.6	10.5	--	--	14.9	15.9	14.9	15.9														
4. ARTR	3.3	--	3.4	5.1	4.0	5.6	14.0	13.8														
5. ASPU	3.6	10.2	--	--	--	--	14.9	15.9														
6. BRTE	--	--	14.0	6.8	14.9	15.6	14.9	15.9														
7. CAS	3.6	8.2	14.1	9.9	14.9	15.3	17.0	17.0														
8. CHVI	3.4	--	3.5	--	4.0	5.7	14.9	15.9														
9. CRE	4.0	6.0	4.3	9.7	14.9	15.7	14.9	15.9														
10. CYMP	--	--	4.5	15.9	14.9	15.9	17.0	17.0														
11. DEPI	--	--	4.0	10.0	14.9	15.8	14.9	15.4														
12. ERI	3.6	--	--	--	--	--	--	--														
13. ERPU	3.4	5.8	4.0	7.3	14.3	15.7	14.9	15.9														
14. HAGL	--	--	3.6	7.0	14.3	15.5	14.9	15.9														
15. KOCR	4.5	6.3	4.7	6.8	14.2	15.0	14.9	15.9														
16. LARE	--	--	4.5	8.0	14.9	15.9	14.9	15.9														
17. LEDE	--	--	4.5	10.5	14.9	13.8	14.9	15.9														
18. LERE	3.6	5.8	4.5	7.5	14.9	15.9	17.0	17.0														
19. OPPO	3.4	5.0	3.5	5.6	4.0	11.5	14.8	15.9														
20. PEER	3.6	5.3	4.0	8.0	14.2	11.0	14.9	15.9														
21. PHHO	3.6	9.0	4.0	10.0	14.5	15.9	14.9	15.9														
22. PLSP	--	--	3.7	5.7	14.9	15.3	14.9	15.9														

TABLE III (continued)

PHENOLOGICAL INVENTORY Study Area Upper Gov't Draw 1975 Type-site ARTR-AGSM

SPECIES IDENTIFICATION	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
	5 Jun		24 Jun		30 Jul		26 Oct															
1. POSE	4.5	6.4	4.7	8.3	14.9	15.9	17.0	17.0														
2. SPCO	3.6	5.2	4.0	---	14.2	13.5	17.0	17.0														
3. STCO	4.3	--	4.5	6.2	14.5	15.8	14.9	15.9														
4. UMB	4.0	10.5	--	--	--	--	--	--														
5. VIAM	3.6	6.2	4.5	7.5	14.3	15.9	17.0	17.0														
6. VIO	3.4	--	--	--	14.3	15.9	14.9	15.9														
7.																						
8.																						
9.																						
10.																						
11.																						
12.																						
13.																						
14.																						
15.																						
16.																						
17.																						
18.																						
19.																						
20.																						
21.																						
22.																						

TABLE IV. Prime species intensive phenological inventory by exclosure, plant species, and data collection date for each permanently identified plant.

		Page
Bud Kimball	Exclosure	38
Cedar Mountain	"	46
Cumberland #3	"	52
Demer	"	61 & 80
Farson	"	103
Horse Creek	"	123
Mesa Antelope	"	163
Owl Draw	"	171
Red Wash #2	"	187
Shoshoni Ant. #7	"	196
Sweetwater	"	216
Upper Gov't Draw	"	72

TABLE IV

Agropyron Smithii Study Area Bud Kimball Date 22 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.3	---	.3	21.6	---	---	1
2.	4.5	5.0	.3	23.6	---	---	2
3.	4.5	5.0	.4	42.5	---	---	2
4.	4.3	---	.4	26.2	---	---	1
5.	4.3	---	.3	18.2	---	---	2
6.	4.5	5.3	.4	26.5	---	---	4
7.	4.6	6.0	.5	33.6	25.2	---	2
8.	3.9	---	.2	17.0	---	---	1
9.	4.6	5.9	.5	45.5	---	---	2
10.	4.5	---	.4	18.1	---	---	1
11.	4.1	---	.3	10.8	---	---	1
12.	4.3	---	.4	15.5	---	---	1
13.	4.2	---	.4	16.2	---	---	1
14.	4.3	---	.4	18.0	---	---	2
15.	4.5	5.2	.5	28.8	---	---	2
16.	4.6	5.7	.5	21.1	---	---	1
17.	4.5	5.1	.4	20.4	---	---	1
18.	4.5	5.2	.4	25.4	---	---	3
19.	4.4	5.3	.5	21.2	---	---	2
20.	4.6	5.8	.5	47.6	---	---	2

TABLE IV

Agropyron Smithii Study Area Bud Kimball Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.7	---	.3	21.6	---	---	1
2.	14.7	11.4	.3	23.6	38.0	6	2
3.	14.7	11.4	.4	42.5	47.0	7	2
4.	14.8	---	.4	26.5	---	---	1
5.	14.6	---	.3	18.2	---	---	2
6.	14.7	11.5	.4	26.5	33.1	6	4
7.	14.8	11.6	.5	33.6	35.7	6	2
8.	14.8	---	.2	17.0	---	---	1
9.	14.7	11.6	.5	45.5	---	---	2
10.	14.7	---	.4	18.1	---	---	1
11.	14.4	---	.3	10.8	---	---	1
12.	14.6	---	.4	15.5	---	---	1
13.	14.8	---	.4	16.2	---	---	1
14.	14.7	---	.4	18.0	---	---	2
15.	14.5	11.3	.5	28.8	38.4	7	2
16.	14.6	11.6	.5	21.1	31.4	6	1
17.	14.5	11.4	.4	20.4	29.5	6	1
18.	14.7	11.5	.4	25.4	34.4	5	3
19.	14.7	11.5	.5	21.7	30.0	5	2
20.	14.7	11.5	.5	47.6	54.0	7	2

TABLE IV

Agropyron Smithii Study Area Bud Kimball Date 15 August 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.9	---	.3	21.6	---	---	1
2.	14.9	15.0	.3	23.6	38.0	6	2
3.	14.9	15.0	.4	42.5	47.0	7	2
4.	14.9	---	.4	26.5	---	---	1
5.	14.9	---	.3	18.2	---	---	2
6.	14.9	15.1	.4	26.5	33.1	6	4
7.	14.9	15.1	.5	33.6	35.7	6	2
8.	14.9	---	.2	17.0	---	---	1
9.	14.9	15.1	.5	45.5	---	---	2
10.	14.9	---	.4	18.1	---	---	1
11.	14.9	---	.3	10.8	---	---	1
12.	14.9	---	.4	15.5	---	---	1
13.	14.9	---	.4	16.2	---	---	1
14.	14.9	---	.4	18.0	---	---	2
15.	14.9	15.0	.5	28.8	38.4	7	2
16.	14.9	15.0	.5	21.1	31.4	6	1
17.	14.9	15.0	.4	20.4	29.5	6	1
18.	14.9	15.1	.4	28.4	34.4	5	3
19.	14.9	15.0	.5	21.2	30.0	5	2
20.	14.9	15.1	.5	47.6	54.0	7	2

TABLE IV

Agropyron Smithii Study Area Bud Kimball Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.9	--	3	21.6	--	--	1
2.	14.9	15.9	3	23.6	38.0	6	2
3.	14.9	15.9	4	42.5	49.0	7	2
4.	14.9	---	4	26.5	--	--	1
5.	14.9	---	3	18.2	--	--	2
6.	14.9	15.9	4	26.5	33.1	6	4
7.	14.9	15.9	5	33.6	35.7	6	2
8.	14.9	--	2	17.0	--	--	1
9.	14.9	15.9	5	45.5	--	--	2
10.	14.9	--	4	18.1	--	--	1
11.	14.9	--	3	10.8	--	--	1
12.	14.9	--	4	15.5	--	--	1
13.	14.9	--	4	16.2	--	--	1
14.	14.9	--	4	18.0	--	--	2
15.	14.9	15.9	5	28.8	38.4	7	2
16.	14.9	15.9	5	21.1	31.6	6	1
17.	14.9	15.9	4	20.4	29.5	6	1
18.	14.9	15.9	4	25.4	34.4	5	3
19.	14.9	15.9	5	21.2	30.0	5	2
20.	14.9	15.9	5	47.6	54.0	2	2

TABLE IV

Artemisia Tridentata Study Area Bud Kimball Date 22 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.5	5.0	27.0	---	---	34.0	3	20	7.5	10.5	
2.	3.3	---	11.0	---	---	13.0	2	1	3.0	---	
3.	3.5	5.0	23.0	---	---	29.0	3	55	5.0	10.5	
4.	3.4	---	10.0	---	---	20.0	2	0	5.0	---	
5.	3.5	5.0	38.0	---	---	63.0	4	25	5.0	8.0	
6.	3.4	5.0	19.5	---	---	34.5	4	20	5.0	10.0	
7.	3.5	5.0	13.0	---	---	9.0	3	1	5.5	10.0	
8.	3.3	5.0	33.2	---	---	42.0	4	10	5.0	8.0	
9.	3.4	---	15.5	---	---	27.0	3	15	4.0	---	Dying
10.	3.5	5.0	17.5	---	---	29.0	3	20	6.5	8.0	
11.	3.4	5.0	23.5	---	---	39.0	3	1	6.5	11.0	
12.	3.4	5.0	12.5	---	---	16.0	2	5	3.0	7.5	
13.	3.4	5.0	11.5	---	---	13.0	2	5	3.5	6.5	
14.	3.5	5.0	18.0	---	---	14.0	2	0	6.0	9.0	
15.	3.5	5.0	27.0	---	---	38.0	4	30	4.5	10.0	
16.	3.4	5.0	19.0	---	---	24.0	5	55	4.0	8.0	
17.	3.5	5.0	31.0	---	----	18.0	4	90	5.5	16.0	
18.	3.5	5.0	55.0	---	---	94.0	4	20	4.5	12.0	
19.	3.3	5.0	41.0	---	---	53.0	4	99	4.0	12.5	
20.	3.4	5.0	22.0	---	---	26.0	3	5	4.5	11.5	

TABLE IV

Artemisia Tridentata Study Area Bud Kimball Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.5	5.5	27.0	---	---	34.0	3	20	7.5	10.8
2.	3.5	---	11.0	---	---	13.0	2	1	3.0	---
3.	3.4	5.6	23.0	---	---	29.0	3	55	5.0	10.8
4.	3.4	---	10.0	---	---	20.0	2	0	5.0	---
5.	3.6	5.6	38.0	---	---	63.0	4	25	5.0	9.0
6.	3.6	5.7	19.5	---	---	34.5	4	20	5.0	11.0
7.	3.4	5.5	13.0	---	---	9.0	2	1	5.5	11.0
8.	3.6	5.4	33.5	---	---	42.0	4	10	5.0	8.6
9.	3.7	---	15.5	---	---	27.0	3	20	4.0	----
10.	3.7	5.6	19.5	---	---	29.0	3	20	6.5	8.9
11.	3.6	5.6	23.5	---	---	39.0	3	1	6.5	11.5
12.	3.6	5.7	12.5	---	---	16.0	2	5	3.0	8.4
13.	3.6	5.6	11.5	---	---	13.0	2	5	3.5	7.8
14.	3.7	5.7	18.0	---	---	14.0	2	0	6.0	10.0
15.	3.7	5.7	27.0	---	---	38.0	4	30	4.5	10.5
16.	3.4	5.6	19.0	---	---	24.0	5	55	4.0	9.0
17.	3.5	5.6	31.0	---	---	18.0	4	90	5.5	16.0
18.	3.6	2.7	55.0	---	---	94.0	4	20	4.5	12.0
19.	3.6	5.5	41.0	---	---	53.0	4	99	4.0	12.6
20.	3.6	5.6	22.0	---	---	26.0	3	5	4.5	11.8

TABLE IV

Artemisia Tridentata Study Area Bud Kimball Date 15 August 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.3	5.7	27.0	---	----	34.0	3	20	7.5	10.5
2.	4.2	---	11.0	---	---	13.0	2	1	3.0	---
3.	4.2	5.7	23.0	---	---	29.0	3	55	5.0	10.5
4.	4.2	---	10.0	---	---	20.0	2	0	5.0	---
5.	4.3	5.7	38.0	---	---	63.0	4	25	5.0	8.0
6.	4.2	5.8	19.5	---	---	34.5	4	20	5.3	10.0
7.	4.2	5.7	13.0	---	---	9.0	2	1	5.5	10.0
8.	4.2	5.8	33.5	---	---	42.0	4	10	5.0	8.0
9.	4.2	---	15.5	---	---	22.0	3	20	4.0	---
10.	4.3	5.6	19.2	---	---	29.0	3	20	6.5	8.0
11.	4.2	5.8	23.5	---	---	39.0	3	1	6.5	11.0
12.	4.3	5.7	12.5	---	---	16.0	2	5	3.0	7.5
13.	4.3	5.7	11.5	---	---	13.0	2	5	3.5	6.5
14.	4.3	5.8	18.0	---	---	14.0	2	0	6.0	9.0
15.	4.3	5.8	27.0	---	---	38.0	4	30	4.5	10.0
16.	4.3	5.8	19.0	---	---	24.0	5	55	4.0	8.0
17.	4.2	5.8	31.0	---	---	18.0	4	90	5.5	16.0
18.	4.3	5.8	55.0	---	---	94.0	4	20	4.5	12.0
19.	4.3	5.7	41.0	---	---	53.0	4	99	4.0	12.5
20.	4.2	5.8	22.0	---	---	26.0	3	5	4.5	11.5

TABLE IV

Artemisia Tridentata   Study Area Bud Kimball   Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.5	8.0	27.0	----	----	34.0	3	20	7.5	10.5
2.	4.5	----	11.0	----	----	13.0	2	1	3.0	----
3.	4.5	8.1	23.0	----	----	29.0	3	55	5.0	10.5
4.	4.5	----	10.0	----	----	20.0	2	0	5.0	----
5.	4.5	8.1	38.0	----	----	63.0	4	25	5.0	8.0
6.	4.5	8.0	19.5	----	----	34.5	4	20	5.0	10.0
7.	4.5	8.0	13.0	----	----	9.0	2	1	5.5	10.0
8.	4.5	8.1	33.5	----	----	42.0	4	10	5.0	10.0
9.	4.5	----	15.5	----	----	27.0	3	20	4.0	----
10.	4.5	8.2	19.5	----	----	29.0	3	20	6.5	8.0
11.	4.5	8.0	23.5	----	----	39.0	3	1	6.5	11.0
12.	4.5	8.0	12.5	----	----	16.0	2	5	3.0	7.5
13.	4.5	8.0	11.5	----	----	13.0	2	5	3.5	6.5
14.	4.5	8.0	18.0	----	----	14.0	2	0	6.0	9.0
15.	4.5	8.1	27.0	----	----	38.0	4	30	4.5	10.0
16.	4.5	8.0	19.0	----	----	24.0	5	55	4.0	8.0
17.	4.5	8.1	31.0	----	----	18.0	4	90	5.5	16.0
18.	4.5	8.0	55.0	----	----	94.0	4	20	4.5	12.0
19.	4.5	8.0	4.0	----	----	53.0	4	99	4.0	12.5
20.	4.5	8.0	22.0	----	----	26.0	3	5	4.0	11.5

TABLE IV

Agropyron Spicatum Study Area Cedar Mtn. Date 19 May 1975

PLANT No.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	CLUMP LGTH. cm.	CLUMP WIDTH cm.	CLUMP DIAM. cm.	MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
1.	3.1				19.5	.2	13.9					Inter-inter
2.	3.1				3.5	.2	5.6					Young-dense
3.	3.2				8.0	.2	10.3					Young-sparse
4.	3.2				14.3	.2	12.8					Inter-dense
5.	3.2				13.7	.3	22.5					Inter-dense
6.	3.3				26.0	.3	15.5					Mature-sparse
7.	3.1				18.0	.2	12.7					Inter-inter
8.	3.2				15.0	.2	9.9					Inter-inter
9.	3.2				11.0	.2	10.9					Inter-inter
10.	3.3				17.0	.2	2.3					Inter-dense
11.	3.3				10.2	.2	10.5					Inter-sparse
12.	3.0				15.0	.2	9.0					Inter-sparse
13.	3.0				14.0	.2	10.2					Inter-sparse
14.	3.1				3.5	.2	10.5					Young-inter
15.	3.2				9.0	.2	12.4					Inter-inter
16.	3.3				10.5	.3	20.5					Inter-dense
17.	3.2				25.0	.2	13.0					Mature-dense
18.	3.1				25.5	.2	16.1					Mature-inter
19.	3.3				22.0	.3	15.2					Mature-sparse
20.	3.3				19.0	.3	13.6					Inter-dense

TABLE IV

Agropyron Spicatum　　Study Area　Cedar Mtn.　　Date　13 June 1975

PLANT No.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	CLUMP LGTH. cm.	CLUMP WIDTH cm.	CLUMP DIAM. cm.	MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
1.	4.2	6.4	---	---	19.5	.2	13.9	29.7	4	23	---	
2.	4.2	6.4	---	---	3.5	.2	5.6	19.4	5	4	---	
3.	4.3	6.5	---	---	8.0	.2	10.3	19.5	4	2	---	
4.	4.3	6.5	---	---	14.3	.2	12.8	25.4	6	3	---	
5.	4.3	6.5	---	---	13.7	.3	22.5	29.6	5	5	---	
6.	4.4	6.6	---	---	26.0	.3	15.5	24.4	4	15	---	
7.	4.2	6.4	---	---	18.0	.2	12.7	20.5	3	12	---	
8.	4.3	6.5	---	---	15.0	.2	9.9	18.5	3	4	---	
9.	4.3	6.5	---	---	11.0	.2	10.9	29.8	5	2	---	
10.	4.4	6.6	---	---	17.0	.2	12.3	26.0	4	13	---	
11.	4.4	6.6	---	---	10.7	.2	10.5	31.5	5	14	---	
12.	4.1	6.3	---	---	15.0	.2	9.0	23.5	5	12	---	=
13.	4.1	---	---	---	14.0	.2	10.2	---	---	---	---	
14.	4.2	6.4	---	---	3.5	.2	10.5	17.6	2	2	---	
15.	4.3	6.5	---	---	9.0	.2	12.4	25.6	6	4	---	
16.	4.4	6.6	---	---	10.5	.3	20.5	33.3	6	40	---	
17.	4.3	1.5	---	---	25.0	.2	13.0	24.0	5	9	---	
18.	4.2	6.4	---	---	25.5	.2	16.1	29.5	5	36	---	
19.	4.4	6.6	---	---	22.0	.3	15.2	33.5	7	21	---	
20.	4.4	6.6	---	---	19.0	.3	13.6	33.5	6	20	---	

TABLE IV

Agropyron Spicatum Study Area Cedar Mtn. Date 31 July 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	4.9	11.3			19.5	.2	13.9	29.7	4	23		
2.	4.9	11.3			3.5	.2	5.6	19.4	5	4		
3.	14.0	11.4			8.0	.2	10.3	19.5	4	2		
4.	14.0	11.4			14.3	.2	12.8	25.4	6	3		
5.	14.0	11.4			13.7	.3	22.5	29.6	5	5		
6.	14.1	11.5			26.0	.3	15.5	24.4	4	15		
7.	4.9	11.3			18.0	.2	12.7	20.5	3	17		
8.	14.0	11.4			15.0	.2	9.9	18.5	3	4		
9.	14.0	11.4			11.0	.2	10.9	27.8	5	2		
10.	14.1	11.5			17.0	.2	12.3	26.0	4	13		
11.	14.1	11.2			10.2	.2	10.2	31.5	5	14		
12.	4.8	11.2			15.0	.2	9.0	23.5	5	12		
13.	4.8	---			14.0	.2	10.3	---	---	---		
14.	4.9	11.3			3.5	.2	10.5	17.6	2	2		
15.	14.0	11.4			9.0	.2	17.4	25.6	6	4		
16.	14.1	11.5			10.5	.3	20.5	33.3	6	40		
17.	14.0	11.4			25.0	.2	13.0	24.0	5	9		
18.	4.9	11.3			25.5	.2	16.1	29.5	5	36		
19.	14.1	11.5			22.0	.3	15.2	33.5	7	21		
20.	14.1	11.5			19.0	.3	13.6	33.5	6	20		

TABLE IV

Artemisia Tridentata Study Area Cedar Mtn. Date 19 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	2.3	---	4.0	---	---	3.8	2	0	---	---
2.	2.5	---	15.1	---	---	27.5	5	10	---	---
3.	2.3	---	26.0	---	---	24.0	4	20	---	---
4.	2.0	---	3.0	---	---	2.5	1	0	---	---
5.	2.5	---	8.3	---	---	3.8	2	0	---	----
6.	2.4	---	15.5	---	---	12.9	2	0	---	---
7.	2.3	---	28.5	---	---	26.7	4	10	---	---
8.	2.3	---	20.0	---	---	20.5	3	2	---	---
9.	2.6	---	35.5	---	---	70.3	4	10	---	---
10.	2.7	---	43.0	---	---	7.4	4	15	---	---
11.	2.2	---	14.5	---	---	24.5	5	55	---	---
12.	2.0	---	3.4	---	---	6.0	2	0	---	---
13.	2.1	---	2.4	---	---	2.0	1	0	---	---
14.	2.2	---	4.8	---	---	24.8	1	0	---	---
15.	2.1	---	3.4	---	---	25.7	1	0	2.5	---
16.	2.3	---	25.0	---	---	23.4	3	12	---	---
17.	2.1	---	39.2	---	---	65.9	4	40	---	---
18.	2.5	---	4.2	---	---	1.9	1	0	---	---
19.	2.3	---	37.3	---	---	28.4	4	20	---	---
20.	2.3	---	6.0	---	---	4.9	2	0	---	---

TABLE IV

Artemisia Tridentata Study Area Cedar Mtn. Date 13 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.3	5.2	6.2	---	---	3.8	2	0	2.0	3.0	
2.	3.5	---	15.2	---	---	27.5	5	10	1.0	---	
3.	3.8	5.2	27.5	---	---	24.0	4	20	1.5	---	
4.	3.0	---	4.0	---	---	2.5	1	0	1.0	---	
5.	3.5	5.2	10.3	---	---	3.8	2	0	2.0	---	
6.	3.4	5.1	16.5	---	---	12.9	2	0	1.0	---	
7.	3.3	5.2	30.0	---	---	26.7	4	10	1.5	---	
8.	3.3	5.2	21.5	---	---	20.5	3	2	1.5	---	
9.	3.6	5.2	34.5	---	---	70.3	4	10	2.0	---	
10.	3.7	5.3	44.5	---	---	7.4	4	15	1.5	---	
11.	3.2	---	18.0	---	---	24.5	5	55	1.5	---	
12.	3.0	---	4.4	---	---	6.0	2	0	1.0	---	
13.	3.1	---	3.4	---	---	2.0	1	0	1.0	---	
14.	3.2	---	4.8	---	---	24.8	1	0	1.0	---	
15.	3.1	---	3.4	---	---	25.2	1	0	1.0	---	
16.	3.3	5.2	28.0	---	---	23.4	3	15	3.0	---	
17.	3.1	5.3	41.2	---	---	65.9	4	40	3.0	---	
18.	3.5	---	5.2	---	---	1.9	1	0	1.0	---	
19.	3.3	5.3	38.8	---	---	28.4	4	20	1.5	---	
20.	3.3	---	7.5	---	---	4.9	2	0	1.5	---	

TABLE IV

Artemisia Tridentata Study Area Cedar Mtn. Date 31 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	4.1	5.6	6.0	---	---	3.8	2	0	2.0	3.0	
2.	4.3	---	15.2	---	---	27.5	5	10	1.0	---	
3.	4.3	5.6	27.5	---	---	24.0	4	20	1.5	---	
4.	3.8	---	4.0	---	---	2.5	1	0	1.0	---	
5.	4.3	5.6	10.3	---	---	3.8	2	0	2.0	---	
6.	4.2	5.5	16.5	---	---	12.9	2	0	1.0	---	
7.	4.1	5.6	30.0	---	---	26.7	4	10	1.5	---	
8.	4.1	5.6	21.5	---	---	20.5	3	2	1.5	---	
9.	4.4	5.7	37.5	---	---	70.3	4	10	2.0	---	
10.	4.5	5.7	44.5	---	---	71.4	4	15	1.5	---	
11.	4.0	---	18.0	---	---	24.5	5	55	1.5	---	
12.	3.8	---	4.4	---	---	6.0	2	0	1.0	---	
13.	3.9	---	3.4	---	---	2.0	1	0	1.0	---	
14.	4.0	---	4.8	---	---	24.8	1	0	1.0	---	
15.	3.9	---	3.4	---	---	25.7	1	0	1.0	---	
16.	4.1	5.6	28.0	---	---	23.4	3	15	3.0	---	
17.	3.9	5.7	41.2	---	---	65.9	4	40	3.0	---	
18.	4.3	---	5.2	---	---	1.9	1	0	1.0	---	
19.	4.0	5.7	38.8	---	---	28.4	4	20	1.5	---	
20.	4.0	---	7.5	---	---	4.9	2	0	1.5	---	

TABLE IV.

Agropyron smithii   Study Area Cumberland #3   Date 12 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	3.0	---	.2	15.0	---	---	2
2.	3.5	---	.4	19.5	---	---	4
3.	3.7	---	.3	22.5	---	---	4
4.	3.5	---	.2	17.2	---	---	2
5.	3.0	---	.2	25.0	---	---	1
6.	3.1	---	.2	11.1	---	---	2
7.	3.6	---	.2	19.3	---	---	2
8.	3.6	---	.3	29.5	---	---	2
9.	3.5	---	.2	19.8	---	---	1
10.	2.5	---	.1	8.4	---	---	1
11.	4.1	---	.3	17.8	---	---	4
12.	4.2	---	.3	17.6	---	---	3
13.	3.6	---	.2	24.4	---	---	2
14.	4.1	---	.2	15.8	---	---	7
15.	3.7	---	.2	22.9	---	---	1
16.	3.1	---	.1	5.5	---	---	2
17.	3.5	---	.2	17.3	---	---	2
18.	3.7	---	.2	22.1	---	---	4
19.	3.8	---	.3	21.0	---	---	2
20.	3.7	---	.3	22.6	---	---	3

TABLE IV

Agropyron smithii Study Area Cumberland #3 Date 26 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.3	---	.2	18.2	---	---	2
2.	3.9	---	.3	21.0	---	---	4
3.	4.1	---	.3	27.2	---	---	4
4.	3.8	---	.2	17.6	---	---	2
5.	3.4	---	.2	28.4	---	---	1
6.	3.8	---	.2	13.2	---	---	2
7.	4.3	---	.2	17.0	---	---	2
8.	3.9	---	.2	20.0	---	---	2
9.	4.2	---	.2	21.5	---	---	1
10.	3.8	---	.2	14.7	---	---	1
11.	4.3	---	.3	19.4	---	---	4
12.	4.2	---	.3	20.1	---	---	3
13.	4.3	---	.3	27.6	---	---	2
14.	4.4	5.1	.2	14.7	---	---	7
15.	4.2	---	.3	29.4	---	---	1
16.	4.1	---	.2	20.1	---	---	2
17.	3.8	---	.2	23.7	---	---	2
18.	4.3	---	.3	23.0	---	---	4
19.	4.3	---	.3	25.5	---	---	2
20.	4.3	---	.3	24.1	---	---	3

TABLE IV

Agropyron smithii Study Area Cumberland #3 Date 30 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.3	---	.2	18.2	---	---	2
2.	14.2	---	.3	21.0	---	---	4
3.	14.2	---	.3	27.2	---	---	4
4.	14.2	---	.2	17.6	---	---	2
5.	14.3	---	.2	28.4	---	---	1
6.	14.7	---	.2	13.2	---	---	2
7.	14.3	---	.2	17.0	---	---	2
8.	14.2	---	.2	20.1	---	---	2
9.	14.4	---	.2	21.5	---	---	1
10.	14.1	---	.2	14.7	---	---	1
11.	14.4	---	.3	19.4	---	---	4
12.	14.3	---	.3	20.1	---	---	3
13.	14.3	---	.3	29.6	---	---	2
14.	14.4	17.0	.2	14.7	24.3	7	7
15.	14.3	---	.3	29.4	---	---	1
16.	14.3	---	.2	20.1	---	---	2
17.	14.1	---	.2	23.7	---	---	2
18.	14.3	---	.3	23.0	---	---	4
19.	14.3	---	.3	25.5	---	---	2
20.	14.3	---	.3	24.1	---	---	3

TABLE IV

Agropyron spicatum Study Area Cumberland #3 Date 12 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	4.4	5.1	---	---	14.0	.3	28.6	---	---	---	---	
2.	4.1	---	---	---	26.0	.3	29.3	---	---	---	---	
3.	4.2	---	---	---	11.0	.3	31.7	---	---	---	---	
4.	4.1	---	---	---	5.0	.3	23.2	---	---	---	---	
5.	3.8	---	---	---	2.0	.3	34.7	---	---	---	---	
6.	3.8	---	---	---	1.0	.3	14.4	---	---	---	---	
7.	4.3	---	---	---	20.0	.3	31.5	---	---	---	---	
8.	3.7	---	---	---	1.0	.3	23.5	---	---	---	---	
9.	4.2	---	---	---	8.0	.4	36.5	---	---	---	---	
10.	4.2	---	---	---	3.0	.3	22.9	---	---	---	---	
11.	4.1	---	---	---	17.0	.3	33.7	---	---	---	---	
12.	4.0	---	---	---	16.0	.3	35.7	---	---	---	---	
13.	4.2	---	---	---	11.0	.3	25.4	---	---	---	---	
14.	4.3	5.2	---	---	14.0	.3	22.0	---	---	---	---	
15.	4.1	---	---	---	4.0	.3	26.1	---	---	---	---	
16.	4.2	---	---	---	7.0	.3	22.2	---	---	---	---	
17.	4.3	5.0	---	---	6.0	.3	31.9	---	---	---	---	
18.	4.1	---	---	---	10.0	.3	24.5	---	---	---	---	
19.	4.2	---	---	---	5.0	.3	23.0	---	---	---	---	
20.	4.3	---	---	---	9.0	.3	31.4	---	---	---	---	

TABLE IV

Agropyron spicatum Study Area Cumberland #3 Date 26 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	4.5	5.2	---	---	14.0	.3	38.7	---	---	---	---	
2.	4.5	6.3	---	---		.3						
3.	4.4	5.2	---	---	11.0	.3	33.8	---	---	---	---	
4.	4.4	5.0	---	---	5.0	.3	23.0	---	---	---	---	
5.	4.5	5.4	---	---	2.0	.4	37.0	---	---	---	---	
6.	4.3	---	---	---	1.0	.3	19.4	---	---	---	---	
7.	4.5	5.3	---	---	20.0	.3	32.7	---	---	---	---	
8.	4.3	---	---	---	1.0	.3	23.0	---	---	---	---	
9.	4.5	5.3	---	---	8.0	.4	35.1	---	---	---	---	
10.	4.4	5.2	---	---	3.0	.3	24.6	---	---	---	---	
11.	4.5	5.3	---	---	17.0	.3	35.8	---	---	---	---	
12.	4.5	5.4	---	---	16.0	.4	32.2	---	---	---	---	
13.	4.5	5.2	---	---	11.0	.3	29.8	---	---	---	---	
14.	4.6	6.3	---	---	14.0	.3	24.6	23.0	3	1	---	
15.	4.4	5.1	---	---	4.0	.3	27.0	---	---	---	---	
16.	4.5	5.2	---	---	7.0	.3	23.4	---	---	---	---	
17.	4.5	5.3	---	---	6.0	.3	32.3	---	---	---	---	
18.	4.4	5.2	---	---	10.0	.3	23.8	---	---	---	---	
19.	4.3	5.1	---	---	5.0	.3	25.0	---	---	---	---	
20.	4.5	5.3	---	---	9.0	.4	32.9	---	---	---	---	

TABLE IV

Agropyron spicatum Study Area Cumberland #3 Date 30 July 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	14.3	15.8	---	---	14.0	.3	38.7	59.0	8.0	29	---	
2.	14.3	15.9	---	---	26.0	.3	44.2	49.2	7.0	42		
3.	14.2	15.7	---	---	11.0	.3	33.8	47.0	7.0	11		
4.	14.2	15.6	---	---	5.0	.3	23.0	48.4	7.0	5		
5.	14.3	15.9	---	---	2.0	.4	37.0	49.4	8.0	2		
6.	14.1	---	---	---	1.0	.3	19.4	---	---	---		
7.	14.3	15.8	---	---	20.0	.3	32.7	60.4	9.0	18		
8.	14.1	---	---	---	1.0	.3	23.0	---	---	---		
9.	14.3	15.8	---	---	18.0	.4	35.1	55.2	8.0	49		
10.	14.2	15.8	---	---	3.0	.3	24.6	53.2	7.0	4		
11.	14.3	15.8	---	---	17.0	.3	35.8	35.2	6.0	14		
12.	14.3	15.9	---	---	16.0	.4	32.2	50.0	7.0	15		
13.	14.3	15.7	---	---	11.0	.3	29.8	56.0	7.0	12		
14.	14.4	15.9	---	---	14.0	.3	24.6	55.2	8.0	20		
15.	14.2	15.7	---	---	4.0	.3	27.0	41.5	5.0	3		
16.	14.3	15.7	---	---	7.0	.3	23.4	38.2	5.0	9		
17.	14.3	15.8	---	---	6.0	.3	32.3	38.7	6.0	7		
18.	14.2	15.8	---	---	10.0	.3	23.8	43.8	5.0	---		
19.	14.1	15.6	---	---	5.0	.3	25.0	38.4	7.0	5		
20.	14.3	15.0	---	---	9.0	.4	32.9	34.5	7.0	12		

TABLE IV

Artemisia tridentata Study Area Cumberland #3 Date 12 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.4	---	48.0	---	---	27.0	3	40	4.5	---	
2.	3.2	---	31.5	---	---	15.0	3	20	1.5	---	
3.	3.3	---	24.0	---	---	14.0	3	1	3.0	---	
4.	3.3	---	40.0	---	---	44.0	4	10	3.5	---	
5.	3.3	---	59.0	---	---	53.0	4	30	3.0	---	
6.	3.2	---	30.0	---	---	33.0	4	20	3.0	---	
7.	3.3	---	35.0	---	---	38.0	3	1	3.5	---	
8.	3.3	---	55.0	---	---	51.0	4	65	3.0	---	Dying
9.	3.3	---	32.0	---	---	19.0	5	35	3.0	---	
10.	3.2	---	74.0	---	---	52.0	5	70	2.0	---	
11.	3.2	---	35.0	---	---	33.0	5	40	2.0	---	
12.	3.3	---	22.0	---	---	17.0	3	25	3.5	---	
13.	3.2	---	73.0	154.0	80.0	117.0	5	25	2.5	---	
14.	3.3	---	64.0	---	---	56.0	4	10	3.5	---	
15.	3.2	---	61.0	---	---	49.0	5	35	2.5	---	
16.	3.3	---	54.0	83.0	65.0	74.0	4	35	2.5	---	
17.	3.2	---	54.5	---	---	37.0	5	65	2.0	---	
18.	3.3	---	43.0	62.0	38.0	50.0	4	30	3.0	---	
19.	3.2	---	56.0	85.0	30.0	58.0	5	40	2.5	---	
20.	3.3	---	44.0	---	---	48.0	4	45	3.5	---	

TABLE IV

Artemisia tridentata Study Area Cumberland #3 Date 26 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.4	5.1	47.0	---	---	27.0	3	40	5.5	8.0	
2.	3.4	--	33.0	---	---	15.0	3	20	1.5	---	
3.	3.4	5.0	29.0	---	---	14.0	3	1	2.5	5.0	
4.	3.4	5.1	43.0	---	---	44.0	4	10	3.0	4.5	
5.	3.4	5.1	57.0	---	---	53.0	4	30	3.0	4.5	
6.	3.4	5.0	31.0	---	---	33.0	4	20	2.5	3.0	
7.	3.4	5.1	36.5	---	---	38.0	3	1	2.5	5.0	
8.	3.4	5.1	56.0	---	---	51.0	4	65	3.0	4.5	Dying
9.	3.4	5.1	34.0	---	---	19.0	5	35	3.0	5.0	
10.	3.4	5.1	73.5	---	---	52.0	5	70	2.5	3.5	
11.	3.4	5.0	35.0	---	---	33.0	5	40	2.0	3.5	
12.	3.4	5.0	22.5	--	---	17.0	3	25	3.0	6.0	
13.	3.4	5.1	74.0	---	---	117.0	5	25	2.5	5.5	
14.	3.4	5.1	70.0	---	---	56.0	4	10	3.0	6.0	
15.	3.4	5.0	60.0	---	---	49.0	5	35	3.0	2.5	
16.	3.4	5.1	55.0	---	---	74.0	4	35	2.5	6.0	
17.	3.3	5.1	65.0	---	---	37.0	5	65	2.0	2.5	
18.	3.4	5.1	46.0	---	---	50.0	4	30	3.0	5.5	
19.	3.4	5.1	57.0	---	---	58.0	5	40	2.5	3.5	
20.	3.4	5.0	47.5	---	---	48.0	4	45	3.5	6.0	

TABLE IV

Artemisia tridentata Study Area Cumberland #3 Date 30 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.1	5.7	47.0	---	---	27.0	3	40	5.5	8.0
2.	4.1	---	33.0	---	---	15.0	3	20	1.5	---
3.	4.1	5.6	29.0	---	---	14.0	3	1	2.5	5.0
4.	4.1	5.7	43.0	---	---	44.0	4	10	3.0	4.5
5.	4.1	5.7	57.0	---	---	53.0	4	30	3.0	4.5
6.	4.1	5.6	31.0	---	---	33.0	4	20	2.5	3.0
7.	4.1	5.7	36.5	---	---	38.0	3	1	2.5	5.0
8.	4.1	5.7	56.0	---	---	51.0	4	65	3.0	4.5
9.	4.1	5.7	34.0	---	---	19.0	5	35	3.0	5.0
10.	4.1	5.7	73.5	---	---	52.0	5	70	2.5	3.5
11.	4.1	5.6	35.0	---	---	33.0	5	40	2.0	3.5
12.	4.1	5.6	22.5	---	---	17.0	3	25	3.0	6.0
13.	4.1	5.7	74.0	---	---	117.0	5	25	2.5	5.5
14.	4.1	5.7	70.0	---	---	56.0	4	10	3.0	6.0
15.	4.1	5.6	60.0	---	---	49.0	5	35	3.0	2.5
16.	4.1	5.7	55.0	---	---	74.0	4	35	2.5	6.0
17.	4.0	5.7	65.0	---	---	37.0	5	65	2.0	2.5
18.	4.1	5.7	46.0	---	---	50.0	4	30	3.0	5.5
19.	4.1	5.7	57.0	---	---	58.0	5	40	2.5	3.5
20.	4.1	5.6	47.5	---	---	48.0	4	45	3.5	6.0

TABLE IV

Agropyron smithii Study Area Demer Date 31 Jan 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.								
6.								
7.	NO NEW GROWTH							
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Demer Date 28 February 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.	NO NEW GROWTH							
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Demer Date 25 April 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	3.3	---	.3	13.0	---	---	3	
2.	---	---	---	---	---	---	---	Dead
3.	2.9	---	.4	9.6	---	---	2	
4.	2.8	---	.3	17.1	---	---	2	
5.	2.9	---	.4	10.2	---	---	2	
6.	2.8	---	.2	1.5	---	---	2	Eaten
7.	3.2	---	.2	14.0	---	---	2	
8.	2.5	---	.1	8.1	---	---	2	
9.	2.8	---	.2	13.4	---	---	1	
10.	3.1	---	.2	8.9	---	---	4	
11.	2.8	---	.2	10.6	---	---	1	
12.	2.5	---	.2	5.5	---	---	1	
13.	2.8	---	.2	15.2	---	---	3	
14.	2.8	---	.2	9.6	---	---	3	
15.	2.7	---	.1	8.6	---	---	4	
16.	2.5	---	.1	7.1	---	---	2	
17.	2.5	---	.1	8.8	---	---	2	
18.	2.8	---	.1	6.0	---	---	1	
19.	2.7	---	.1	8.0	---	---	3	
20.	3.1	---	.2	9.1	---	---	2	

TABLE IV

Agropyron smithii Study Area Demer Date 28 May 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.4	5.1	.4	23.0	---	---	3
2.	3.9	---	.3	13.0	---	---	---
3.	4.4	5.1	.4	22.2	---	---	2
4.	4.1	---	.3	24.6	---	---	2
5.	4.4	5.0	.5	22.9	---	---	2
6.	4.4	5.1	.3	14.5	---	---	2
7.	4.5	5.1	.4	23.3	---	---	2
8.	4.1	---	.3	12.2	---	---	2
9.	4.2	---	.4	19.3	---	---	1
10.	4.3	---	.4	16.4	---	---	4
11.	2.9	---	.1	9.7	---	---	1
12.	3.9	---	.3	13.8	---	---	1
13.	4.3	---	.4	20.4	---	---	3
14.	3.9	---	.3	15.2	---	---	3
15.	4.1	---	.2	11.6	---	---	4
16.	3.8	---	.2	12.9	---	---	2
17.	3.8	---	.2	14.1	---	---	2
18.	3.9	---	.3	15.8	---	---	1
19.	4.2	---	.3	16.2	---	---	3
20.	4.4	---	.4	19.5	---	---	2

TABLE IV

Agropyron smithii   Study Area   Demer   Date   10 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.5	6.1	.4	37.5	22.7	2	3
2.	3.8	---	.3	14.9	---	---	---
3.	4.4	6.1	.4	36.0	33.7	2	2
4.	4.6	---	.4	26.0	---	---	2
5.	4.6	6.3	.5	38.2	41.2	5	2
6.	4.3	5.4	.3	19.1	---	---	2
7.	4.6	6.0	.4	34.8	30.4	---	2
8.	4.2	---	.3	13.6	---	---	2
9.	4.4	---	.4	24.2	---	---	1
10.	4.5	---	.4	19.0	---	---	4
11.	3.8	---	.1	9.7	---	---	1
12.	3.8	---	.2	16.8	---	---	1
13.	4.5	5.6	.4	26.3	---	---	3
14.	4.4	---	.3	16.6	---	---	3
15.	3.8	---	.3	14.5	---	---	4
16.	4.4	---	.2	15.7	---	---	2
17.	4.2	---	.2	14.8	---	---	2
18.	4.5	---	.3	18.0	---	---	1
19.	4.3	---	.3	16.9	---	---	3
20.	4.3	---	.3	23.4	---	---	2

TABLE IV

Agropyron smithii Study Area Demer Date 23 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.0	6.7	.4	37.1	42.0	11	3	Losing, falling off
2.	4.4	---	.3	18.1	---	---	---	
3.	14.1	6.7	.5	44.3	56.5	10	2	Losing, falling off
4.	4.6	---	.3	26.2	---	---	2	
5.	14.1	6.8	.5	36.0	62.2	17	2	Losing, falling off
6.	4.7	---	.3	17.1	---	---	2	
7.	4.4	---	.3	21.4	---	---	2	
8.	4.0	---	.3	12.9	---	---	2	
9.	4.7	5.2	.4	24.5	---	---	1	
10.	4.5	---	.4	20.0	---	---	4	
11.	4.1	---	.1	10.4	---	---	1	
12.	4.4	---	.2	19.5	---	---	1	
13.	4.8	---	.4	21.4	---	---	3	
14.	4.4	---	.2	19.1	---	---	3	
15.	4.4	---	.3	15.7	---	---	4	
16.	4.4	---	.2	18.1	---	---	2	
17.	4.4	---	.2	13.7	---	---	2	
18.	4.5	---	.3	19.5	---	---	1	
19.	4.3	---	.3	19.2	---	---	3	
20.	4.7	---	.3	23.1	---	---	2	

TABLE IV

Agropyron smithii Study Area Demer Date 15 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.1	10.5	.4	24.6	42.2	9	3	
2.	14.0	---	.3	18.2	---	---	---	
3.	14.1	10.5	.4	44.0	56.0	11	2	
4.	14.0	---	.4	27.5	---	---	2	
5.	14.1	11.0	.4	35.5	62.0	13	2	
6.	14.0	11.0	.3	21.5	36.7	3	2	
7.	14.0	---	.3	22.5	---	---	2	
8.	14.1	---	.3	13.2	---	---	2	
9.	14.0	---	.4	24.7	---	---	1	
10.	14.0	---	.4	20.3	---	---	4	
11.	---	---	---	---	---	---	---	Dead
12.	14.0	---	.3	19.5	---	---	1	
13.	14.0	---	.4	33.1	---	---	3	
14.	14.0	---	.3	19.8	---	---	3	
15.	14.0	---	.3	22.6	---	---	4	
16.	14.1	---	.3	17.9	---	---	2	
17.	14.0	---	.3	16.6	---	---	2	
18.	14.1	---	.3	19.4	---	---	1	
19.	14.0	---	.3	21.1	---	---	3	
20.	14.1	---	.3	23.2	---	---	2	

TABLE IV

Agropyron smithii Study Area Demer Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.3	15.2	.3	44.0	49.5	11	---	
2.	14.3	---	.3	18.0	---	---	---	
3.	14.3	12.5	.4	29.0	56.0	11	---	
4.	14.3	---	.3	27.4	---	---	---	
5.	14.3	13.5	.3	38.8	44.2	10	---	
6.	14.4	---	.2	16.7	---	---	---	
7.	14.3	---	.3	28.0	---	---	---	
8.	14.3	---	.2	13.1	---	---	---	
9.	14.3	---	.4	24.7	---	---	---	
10.	14.3	---	.3	18.0	---	---	---	
11.	---	---	---	---	---	---	---	Dead
12.	14.4	---	.3	19.5	---	---	---	
13.	14.4	---	.1	5.7	---	---	---	
14.	14.3	---	.2	20.0	---	---	---	
15.	14.3	---	.2	16.1	---	---	---	
16.	14.4	---	.2	18.1	---	---	---	
17.	14.3	---	.2	17.0	---	---	---	
18.	14.3	---	.2	19.5	---	---	---	
19.	14.2	---	.3	21.6	---	---	---	
20.	19.3	---	.2	20.8	---	---	---	

TABLE IV

Agropyron smithii Study Area Demer Date 15 October 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.9	15.9	.3	44.0	49.5	11	3	
2.	14.9	---	.3	18.0	---	---	2	
3.	14.9	15.9	.4	29.0	56.0	11	2	
4.	14.9	---	.3	27.9	---	---	2	
5.	14.9	15.9	.3	38.8	44.2	10	2	
6.	14.9	---	2	14.7	---	---	2	
7.	14.9	---	.3	28.0	---	---	2	
8.	14.9	---	.2	13.1	---	---	2	
9.	14.9	---	.4	24.7	---	---	1	
10.	14.9	---	.3	18.0	---	---	4	
11.	---	---	---	---	---	---	---	Dead
12.	14.9	---	.3	19.5	---	---	1	
13.	14.9	---	.1	5.7	---	---	3	
14.	14.9	---	.2	20.0	---	---	3	
15.	14.9	---	.2	16.1	---	---	4	
16.	14.9	---	.2	18.1	---	---	2	
17.	14.9	---	.2	17.0	---	---	2	
18.	14.9	---	.2	19.8	---	---	1	
19.	14.9	---	.3	21.6	---	---	3	
20.	14.9	---	.2	20.8	---	---	2	

TABLE IV

Agropyron smithii Study Area Demer Date 14 November 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	16.8	15.9	.3	44.0	49.5	11	3	
2.	16.8	---	.3	18.0	---	---	---	Fall re-greening only on the stems. No new leaves appeared
3.	16.8	15.9	.4	29.0	56.0	11	2	
4.	16.8	---	.3	27.4	---	---	2	
5.	16.8	15.9	.3	38.8	44.2	10	2	
6.	16.8	---	.2	16.7	---	---	2	
7.	16.8	---	.3	28.0	---	---	2	
8.	16.8	---	.2	13.1	---	---	2	
9.	16.8	---	.4	24.7	---	---	1	
10.	16.8	---	.3	18.0	---	---	4	
11.	---	---	---	---	---	---	---	Dead
12.	16.8	---	.3	19.5	---	---	1	
13.	16.8	---	.1	5.7	---	---	3	
14.	16.8	---	.2	20.0	---	---	3	
15.	16.8	---	.2	16.1	---	---	4	
16.	16.8	---	.2	18.1	---	---	2	
17.	16.8	---	.2	17.0	---	---	2	
18.	16.8	---	.2	19.5	---	---	1	
19.	16.8	---	.3	21.6	---	---	3	
20.	16.8	---	.2	20.8	---	---	2	

TABLE IV

Agropyron smithii Study Area Demer Date 29 December 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
1.	17.0	17.0	.3	44.0	49.5	11	3	
2.	17.0	---	.3	18.0	---	---	---	
3.	17.0	17.0	.4	29.0	56.0	11	2	
4.	17.0	---	.3	27.4	---	---	2	
5.	17.0	17.0	.3	38.8	44.2	10	2	
6.	17.0	---	.2	16.7	---	---	2	
7.	17.0	---	.3	28.0	---	---	2	
8.	17.0	---	.2	13.1	---	---	2	
9.	17.0	---	.4	24.7	---	---	1	
10.	17.0	---	.3	18.0	---	---	4	
11.	---	---	---	---	---	---	---	Dead
12.	17.0	---	.3	19.5	---	---	1	
13.	17.0	---	.1	5.7	---	---	3	
14.	17.0	---	.2	20.0	---	---	3	
15.	17.0	---	.2	16.1	---	---	4	
16.	17.0	---	.2	18.1	---	---	2	
17.	17.0	---	.2	17.0	---	---	2	
18.	17.0	---	.2	19.5	---	---	1	
19.	17.0	---	.3	21.6	---	---	3	
20.	17.0	---	.2	20.8	---	---	2	

TABLE IV

Agropyron smithii Study Area Upper Gov't Draw Date 5 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	3.5	---	.2	16.6	---	---	1
2.	4.1	---	.2	19.5	---	---	4
3.	4.2	---	.3	21.7	---	---	2
4.	3.7	---	.3	23.8	---	---	2
5.	3.8	---	.3	21.1	---	---	2
6.	3.8	---	.3	24.5	---	---	2
7.	4.3	---	.3	21.6	---	---	1
8.	3.9	---	.3	19.1	---	---	1
9.	3.8	---	.3	21.0	---	---	4
10.	3.4	---	.3	20.7	---	---	3
11.	3.8	---	.2	19.2	---	---	3
12.	3.8	---	.2	20.5	---	---	2
13.	3.9	---	.3	20.3	---	---	1
14.	3.9	---	.3	29.8	---	---	3
15.	4.3	5.2	.4	20.3	---	---	1
16.	3.7	---	.3	17.0	---	---	3
17.	3.9	---	.2	19.6	---	---	1
18.	3.8	---	.3	34.5	---	---	1
19.	3.6	---	.2	21.0	---	---	4
20.	3.4	---	.2	13.6	---	---	1

TABLE IV

Agropyron smithii Study Area Upper Gov't Draw Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.4	---	.3	19.6	---	---	1
2.	3.8	---	.4	10.9	---	---	4
3.	4.3	---	.3	24.6	---	---	2
4.	4.5	---	.2	19.1	---	---	2
5.	4.6	5.5	.4	21.3	---	---	2
6.	4.4	---	.3	26.5	---	---	7
7.	4.5	5.0	.4	29.2	---	---	1
8.	4.5	---	.2	22.6	---	---	1
9.	4.5	---	.3	22.2	---	---	4
10.	4.4	---	.2	21.3	---	---	3
11.	4.4	---	.3	27.0	---	---	3
12.	4.0	---	.3	25.1	---	---	2
13.	4.0	---	.2	22.7	---	---	1
14.	4.5	5.3	.3	38.0	---	---	3
15.	4.6	6.2	.3	31.7	31.6	5	1
16.	4.3	---	.3	16.7	---	---	3
17.	3.9	---	.1	21.7	---	---	1
18.	4.6	5.1	.3	39.4	---	---	1
19.	4.3	---	.2	24.1	---	---	4
20.	4.2	---	.1	16.9	---	---	1

TABLE IV

Agropyron smithii Study Area Upper Gov't Draw Date 30 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.2	---	.3	19.6	---	---	1
2.	14.0	---	.4	10.9	---	---	4
3.	14.2	---	.3	24.6	---	---	2
4.	14.3	---	.2	19.1	---	---	2
5.	14.4	12.1	.4	21.3	---	5	2
6.	14.2	---	.3	26.5	28.4	---	7
7.	14.3	12.0	.4	27.2	27.2	5	1
8.	14.3	---	.2	22.6	---	---	1
9.	14.3	---	.3	22.2	---	---	4
10.	14.2	---	.2	21.3	---	---	3
11.	14.2	---	.3	27.0	---	---	3
12.	4.9	---	.3	25.1	---	---	2
13.	4.9	---	.2	22.7	---	---	1
14.	14.3	12.0	.3	38.0	39.1	5	3
15.	14.4	12.1	.3	31.7	31.6	5	1
16.	14.1	---	.3	16.7	---	---	3
17.	4.8	---	.1	21.7	---	---	1
18.	14.4	12.1	.3	39.4	39.3	5	1
19.	14.1	---	.2	24.1	---	---	4
20.	14.0	---	.1	16.9	---	---	1

TABLE IV

Agropyron smithii Study Area Upper Gov't Draw Date 26 October 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.9	---	.3	19.6	---	---	1
2.	14.9	---	.4	10.9	---	---	4
3.	14.9	---	.3	24.6	---	---	2
4.	14.9	---	.2	19.1	---	---	2
5.	14.9	15.9	.4	21.3	---	5	2
6.	14.9	---	.3	26.5	28.4	---	7
7.	14.9	15.9	.4	27.2	27.2	5	1
8.	14.9	---	.2	22.6	---	---	1
9.	14.9	---	.3	22.2	---	---	4
10.	14.9	---	.2	21.3	---	---	3
11.	14.9	---	.3	27.0	---	---	3
12.	14.9	---	.3	25.1	---	---	2
13.	14.9	---	.2	22.7	---	---	1
14.	14.9	15.9	.3	38.0	39.1	5	3
15.	14.9	15.9	.3	31.7	31.6	5	1
16.	14.9	---	.3	16.7	---	---	3
17.	14.9	---	.1	21.7	---	---	1
18.	14.9	15.9	.3	39.4	37.3	5	1
19.	14.9	---	.2	24.1	---	---	4
20.	14.9	---	.1	16.9	---	---	1

TABLE IV

Artemisia tridentata Study Area Upper Gov't Draw Date 5 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.3	---	18.0	---	---	23.4	3	10	3.5	---
2.	3.2	---	25.0	---	---	38.7	5	30	3.0	---
3.	3.1	---	28.0	---	---	38.0	4	30	2.0	---
4.	3.3	---	26.0	---	---	12.1	3	40	4.0	---
5.	3.2	---	32.0	---	---	47.8	4	20	3.0	---
6.	3.2	---	30.0	---	---	39.2	4	15	3.0	---
7.	3.1	---	19.0	---	---	21.6	3	5	1.5	---
8.	3.1	---	17.5	---	---	13.9	2	10	1.5	---
9.	3.3	---	37.0	---	---	43.5	4	5	4.0	---
10.	3.3	---	32.0	---	---	35.5	5	10	4.5	---
11.	5.3	---	32.5	---	---	37.7	4	10	4.0	---
12.	3.3	---	17.3	---	---	16.9	3	5	3.5	---
13.	3.3	---	29.5	---	---	55.0	4	15	4.0	---
14.	3.1	---	9.0	---	---	14.2	3	55	1.0	---
15.	3.3	---	20.5	---	---	21.7	3	1	4.5	---
16.	3.3	---	26.0	---	---	37.4	4	15	3.5	---
17.	3.3	---	28.0	---	---	37.4	4	15	4.0	---
18.	3.3	---	39.5	---	---	37.9	4	15	5.5	---
19.	3.2	---	18.0	---	---	15.9	3	25	3.0	---
20.	3.3	---	36.5	---	---	36.0	4	5	4.5	---

TABLE IV

Artemisia tridentata Study Area Upper Gov't Draw Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER- CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.4	5.0	22.5	---	---	23.4	3	10	3.5	5.0
2.	3.4	5.1	22.5	---	---	38.7	5	30	2.5	5
3.	3.4	5.1	28.5	---	---	38.0	4	30	2.5	7
4.	3.4	5.1	26.0	---	---	12.1	3	40	3	5
5.	3.4	5.1	34.0	---	---	47.8	4	20	3	5
6.	3.4	5.1	33.5	---	---	39.2	4	15	4.5	5.5
7.	3.4	---	18.0	---	---	21.6	3	5	2	---
8.	3.4	5.0	18.5	---	---	13.9	2	10	2	2.5
9.	3.5	5.1	37.5	---	---	43.5	4	5	4.5	8
10.	3.5	5.1	37.0	---	---	35.5	5	10	3.5	6
11.	3.4	5.1	34.0	---	---	37.7	4	10	4	7
12.	3.4	---	20.0	---	---	16.9	3	5	4.5	---
13.	3.4	5.1	34.5	---	---	55.0	4	15	3	5
14.	3.4	---	9.5	---	---	14.2	3	55	1.5	---
15.	3.4	5.1	23.5	---	---	21.7	3	1	3	4.5
16.	3.4	5.1	25.0	---	---	37.4	4	15	2.5	5
17.	3.4	5.1	31.5	---	---	37.4	4	15	3	5.5
18.	3.4	5.7	35	---	---	37.9	4	15	3	7
19.	3.4	5.1	22.5	---	---	15.5	3	25	3	7
20.	3.5	5.0	38	---	---	36.0	4	5	4	2

TABLE IV

Artemisia tridentata   Study Area Upper Gov't Draw   Date 30 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.0	5.5	22.5	——	——	23.4	3	10	3.5	5.5
2.	4.0	5.6	22.5	——	——	38.7	5	30	2.5	5.5
3.	4.0	5.6	28.5	——	——	38.0	4	30	2.5	7.5
4.	4.0	5.6	26.5	——	——	12.1	3	40	3.5	5.5
5.	4.0	5.6	34.3	——	——	47.8	4	20	3.5	5.5
6.	4.0	5.6	33.8	——	——	39.2	4	15	4.5	6.0
7.	4.0	——	18.2	——	——	21.6	3	5	2.5	——
8.	4.0	5.5	18.5	——	——	13.9	2	10	2.5	3.0
9.	4.1	5.6	37.6	——	——	43.5	4	5	4.6	8.5
10.	4.1	5.6	37.2	——	——	35.5	5	10	3.5	6.5
11.	4.0	5.6	34.1	——	——	37.7	4	10	4.1	7.5
12.	4.0	——	20.4	——	——	16.9	3	5	5.0	——
13.	4.0	5.6	34.5	——	——	55.0	4	15	3.5	5.5
14.	4.0	——	9.7	——	——	14.2	3	55	2.0	——
15.	4.0	5.6	23.6	——	——	21.7	3	1	3.5	5.0
16.	4.0	5.6	25.7	——	——	37.4	4	15	2.5	5.5
17.	4.0	5.6	31.8	——	——	37.4	4	15	3.5	6.0
18.	4.0	5.7	35.4	——	——	37.9	4	15	3.5	7.0
19.	4.0	5.6	22.6	——	——	15.5	3	25	3.0	7.0
20.	4.1	5.5	39.0	——	——	36.0	4	5	4.5	7.5

TABLE IV

Artemisia tridentata Study Area Upper Gov't Draw Date 26 October 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	14.0	13.7	22.5	---	---	23.4	3	10	3.5	5.5
2.	14.0	13.8	22.5	---	---	38.7	5	30	2.5	5.5
3.	14.0	13.8	28.5	---	---	38.0	4	30	2.5	7.5
4.	14.0	13.8	26.5	---	---	12.1	3	40	3.5	5.5
5.	14.0	13.8	34.3	---	---	42.8	4	20	3.7	5.5
6.	14.0	13.8	33.8	---	---	39.2	4	15	4.5	6.0
7.	14.0	---	18.2	---	---	21.6	3	5	2.5	---
8.	14.0	13.6	18.5	---	---	13.9	2	10	2.5	3.0
9.	14.1	13.8	37.6	---	---	43.5	4	5	4.6	8.5
10.	14.1	13.8	37.2	---	---	35.5	5	10	3.5	6.5
11.	14.0	13.8	34.1	---	---	37.7	4	10	4.1	7.5
12.	14.0	---	20.4	---	---	16.9	3	5	5.0	---
13.	14.0	13.7	34.5	---	---	55.0	4	15	3.5	5.5
14.	14.0	---	9.7	---	---	14.2	3	55	2.0	---
15.	14.0	13.8	23.6	---	---	21.7	3	1	3.5	5.0
16.	14.0	13.7	25.7	---	---	37.4	4	15	2.5	5.5
17.	14.0	13.8	31.8	---	---	37.4	4	15	3.5	6.0
18.	14.0	13.9	35.4	---	---	37.9	4	15	3.5	7.0
19.	14.0	13.8	22.6	---	---	15.5	3	25	3.0	7.0
20.	14.1	13.6	39.0	---	---	36.0	4	5	4.5	7.5

TABLE IV

Agropyron spicatum Study Area Demer Date 31 January 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.	NO NEW GROWTH											
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum   Study Area Demer   Date 28 February 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.												
2.												
3.												
4.												
5.			NO									
6.												
7.				NEW								
8.												
9.					GROWTH							
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Demer Date 25 April 1975

PLANT No.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	CLUMP LGTH. cm.	CLUMP WIDTH cm.	CLUMP DIAM. cm.	MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
1.	3.1	---	---	---	8.2	.2	7.2	---	---	---	---	Inter-dense
2.	3.3	---	---	---	29.0	.3	13.9	---	---	---	---	Mature
3.	3.3	---	---	---	12.0	.3	11.0	---	---	---	---	Inter-dense
4.	3.3	---	---	---	24.0	.3	17.5	---	---	---	---	Mature-dense
5.	3.2	---	---	---	29.0	.2	9.3	---	---	---	---	Mature-Inter
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Demer Date 28 May 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	4.4	5.2	---	---	8.5	.4	31.2	---	---	---	---	
2.	4.4	5.2	---	---	29.0	.4	27.5	---	---	---	---	
3.	4.3	5.0	---	---	17.0	.3	26.3	---	---	---	---	
4.	4.4	5.2	---	---	24.0	.4	38.0	---	---	---	----	
5.	4.4	5.2	---	---	27.0	.4	31.3	---	---	---	---	
6.	4.4	5.1	---	---	10.0	.4	24.9	---	---	---	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum   **Study Area** Demer   **Date** 10 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	4.6	6.2	---	---	8.5	.5	43.2	36.4	3	19	---	
2.	4.7	6.5	---	---	29.0	.5	4.1	40.7	7	124	---	
3.	4.5	6.5	---	---	12.0	.4	32.7	34.1	4	4	---	
4.	4.6	6.6	---	---	24.0	.4	50.6	48.1	6	18	---	
5.	4.2	6.5	---	---	27.0	.4	31.7	33.5	5	11	---	
6.	4.9	5.2	---	---	10.0	.3	29.2	---	---	---	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Demer Date 23 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	4.8	6.7	---	---	8.5	.4	4.0	47.5	6	10	---	
2.	14.1	7.8	---	---	29.0	.5	38.2	50.7	10	130	---	
3.	4.8	6.8	---	---	12.0	.3	38.6	5.0	6	6	---	
4.	14.0	6.7	---	---	24.0	.4	48.4	56.7	9	15		
5.	14.0	6.8	---	---	27.0	.3	37.6	45.5	6	6	---	
6.	4.4	5.1	---	---	10.0	.3	28.3	---	---	---	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Demer Date 15 July 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	14.0	11.0	---	---	8.2	.4	35.5	51.3	8	9	---	
2.	14.1	10.8	---	---	29.0	.4	42.5	55.0	8	115	---	
3.	14.0	11.0	---	---	12.0	.3	37.5	51.5	6	4	---	
4.	14.0	11.0	---	---	24.0	.3	27.0	61.0	8	11	---	
5.	14.1	11.0	---	---	27.0	.3	37.5	46.7	5	4	---	
6.	14.0	---	---	---	10.0	.3	31.7	---	---	---	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Demer Date 29 July 1975

PLANT No.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	CLUMP LGTH. cm.	CLUMP WIDTH cm.	CLUMP DIAM. cm.	MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
1.	14.3	13.5	---	---	8.5	.3	39.8	55.5	9	7	---	
2.	14.3	13.5	---	---	29.0	.3	36.5	49.0	7	4	---	Eaten
3.	14.3	13.5	---	---	12.0	.4	49.0	51.5	8	11	---	
4.	14.3	13.5	---	---	24.0	.3	32.6	45.9	6	6	---	
5.	14.3	---	---	---	27.0	.3	33.3	---	---	---	---	
6.	14.4	15.0	---	---	10.0	.4	36.5	43.5	12	1129	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum **Study Area** Demer **Date** 15 October 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	14.9	15.9	---	---	8.5	.3	39.8	55.5	9	7	---	
2.	14.9	15.9	---	---	29.0	.3	36.5	49.0	7	4	---	Eaten
3.	14.9	15.9	---	---	12.0	.4	49.0	51.5	8	11		
4.	14.9	15.9	---	---	24.0	.3	32.6	45.9	6	6		
5.	14.9	15.9	---	---	27.0	.3	33.3	---	---	---	---	
6.	14.9	15.9	---	---	10.0	.4	36.5	43.5	12	129	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum **Study Area** Demer **Date** 14 November 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	16.8	15.9	---	---	8.5	.3	39.8	55.0	9	7	---	
2.	16.8	15.9	---	---	29.0	.3	36.5	49.0	7	4	---	Fall re-greening
3.	16.8	15.9	---	---	12.0	.4	49.0	51.5	8	11	---	Old stems only
4.	16.8	15.9	---	---	24.0	.3	32.6	45.9	6	6	---	No new leaves appear
5.	16.8	15.9	---	---	27.0	.3	33.3	---	---	---	---	
6.	16.8	15.0	---	---	10.0	.4	36.5	43.5	12	129		
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

Agropyron spicatum Study Area Demer Date 29 December 1975

PLANT NO.	PHENO. STAGE SCORE		CLUMP			MAX LEAF WIDTH	MAX LEAF HGHT	MAX SPIKE HGHT	NOS SPIKELETS/ CULM	NOS REPR CULMS	NOS VEG CULMS	MATURITY
	VEG	REPR	LGTH cm	WIDTH cm	DIAM cm	cm	cm	cm				
1.	17.0	17.0	--	--	8.5	.3	39.8	55.5	9	7	--	
2.	17.0	17.0	--	--	29.0	.3	36.5	49.0	7	4	--	
3.	17.0	17.0	--	--	12.0	.4	49.0	51.5	8	11	--	
4.	17.0	17.0	--	--	24.0	.3	32.6	42.9	6	6	--	
5.	17.0	17.0	--	--	27.0	.3	33.3	--	--	--	--	
6.	17.0	17.0	--	--	10.0	.4	36.5	43.5	12	129	--	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Demer Date 29 December 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	17.0	17.0	---	---	8.5	.3	39.8	55.5	9	7	---	
2.	17.0	17.0	---	---	29.0	.3	36.5	49.0	7	4	---	
3.	17.0	17.0	---	---	12.0	.4	49.0	51.5	8	11	---	
4.	17.0	17.0	---	---	24.0	.3	32.6	45.9	6	6	---	
5.	17.0	17.0	---	---	27.0	.3	33.3	---	---	---	---	
6.	17.0	17.0	---	---	10.0	.4	36.5	43.5	12	129	---	
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Artemisia tridentata Study Area Demer Date 31 January 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.			NO								
5.											
6.				NEW							
7.											
8.					GROWTH						
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Demer Date 28 February 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.			NO								
5.											
6.				NEW							
7.											
8.					GR	OWTH					
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Demer Date 25 April 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	---	---	---	---	---	---	---	100	---	---
2.	3.1	---	20.5	---	---	34.5	3	15	1.5	1.5
3.	3.2	---	15.1	---	---	36.0	3	99	3.2	---
4.	3.2	---	11.1	---	---	37.5	5	75	2.5	---
5.	3.0	---	14.9	---	---	43.3	5	60	1.5	---
6.	3.2	---	26.1	---	---	36.7	4	20	3.0	---
7.	3.3	---	8.6	---	---	10.1	5	60	3.5	---
8.	3.1	---	20.5	---	---	50.1	4	45	3.0	---
9.	3.1	---	18.2	---	---	28.7	4	10	2.0	---
10.	3.2	---	32.4	---	---	49.6	4	1	2.5	---
11.	3.2	---	25.0	---	---	41.9	4	10	2.5	---
12.	3.1	---	21.7	---	---	44.3	4	10	2.0	---
13.	3.2	---	32.2	---	---	59.6	5	85	3.0	---
14.	3.1	---	32.0	---	---	21.7	5	60	2.5	---
15.	3.1	---	39.4	---	---	38.9	5	45	2.5	---
16.	3.1	---	17.2	---	---	19.0	5	65	2.0	---
17.	3.0	---	14.7	---	---	29.0	3	2	1.0	---
18.	3.2	---	24.1	---	---	48.2	4	10	3.0	---
19.	---	---	---	---	---	---	---	100	---	---
20.	---	---	---	---	---	---	---	100	---	---

TABLE IV

Artemisia tridentata   Study Area Demer   Date 28 May 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	3.3	---	19.5	---	---	17.0	3	15	6.0	---
2.	3.3	---	22.0	---	---	34.5	3	15	5.0	---
3.	3.2	---	8.5	---	---	36.0	3	99	4.0	---
4.	3.2	---	14.0	---	---	37.5	5	75	3.5	---
5.	3.2	---	16.5	---	---	43.3	5	60	3.5	---
6.	3.3	---	26.5	---	---	36.7	4	20	4.5	---
7.	3.1	---	9.0	---	---	10.1	5	60	3.0	---
8.	3.1	---	23.0	---	---	50.1	4	45	3.0	---
9.	3.1	---	22.5	---	---	28.7	4	10	4.0	---
10.	3.3	---	33.5	---	---	49.6	4	1	6.0	---
11.	3.3	---	28.5	---	---	41.9	4	10	5.0	---
12.	3.2	---	22.5	---	---	44.3	4	10	4.5	---
13.	3.1	---	37.5	---	---	59.6	5	85	4.0	---
14.	3.3	---	43.0	---	---	21.7	5	60	6.0	---
15.	3.2	---	41.0	---	---	38.9	5	45	4.0	---
16.	3.1	---	19.0	---	---	19.0	5	65	3.0	---
17.	3.1	---	15.0	---	---	29.0	3	2	3.0	---
18.	3.2	---	24.5	---	---	48.2	4	10	3.5	---
19.	---	---	---	---	---	---	---	100	---	---
20.	---	---	---	---	---	---	---	100	---	---

TABLE IV

Artemisia tridentata　　Study Area　Demer　　Date　10 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.7	---	23.0	---	---	17.0	3	15	10.0	---
2.	3.6	---	25.0	---	---	39.5	3	15	7.0	---
3.	3.4	---	16.0	---	---	36.0	3	85	6.0	---
4.	3.4	---	15.5	---	---	37.5	5	75	5.0	---
5.	3.3	---	18.5	---	---	43.3	5	60	5.0	---
6.	3.5	---	28.0	---	---	36.7	4	20	7.5	---
7.	3.3	---	10.0	---	---	10.1	5	60	5.0	---
8.	3.4	---	24.5	---	---	50.1	4	45	5.5	---
9.	3.5	---	29.0	---	---	28.7	4	10	6.5	---
10.	3.6	---	34.0	---	---	49.6	4	1	8.0	---
11.	3.6	---	31.5	---	---	41.9	4	10	8.5	---
12.	3.5	---	23.0	---	---	44.3	4	10	7.0	---
13.	3.3	---	36.5	---	---	59.6	5	85	4.0	---
14.	3.5	---	34.5	---	---	21.7	5	60	7.0	---
15.	3.4	---	42.0	---	---	38.9	5	45	6.0	---
16.	3.3	---	15.0	---	---	19.0	5	65	4.0	---
17.	3.3	---	16.0	---	---	29.0	3	2	4.0	---
18.	3.5	---	29.0	---	---	48.2	4	10	9.0	---
19.	3.5	---	21.0	21.0	12.0	17.0	4	50	6.0	---
20.	3.4	---	24.5	49.0	22.0	36.0	4	40	5.5	---

TABLE IV

Artemisia tridentata   Study Area Demer   Date 23 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.5	5.1	28.0	---	---	17.0	3	15	8.0	14.5
2.	3.5	5.1	24.0	---	---	34.5	3	15	6.0	9.0
3.	3.4	---	20.0	---	---	36.0	3	85	6.0	---
4.	3.4	5.0	15.5	---	---	37.5	5	75	5.0	6.0
5.	3.4	5.0	23.0	---	---	43.3	5	60	5.0	6.5
6.	3.5	5.1	25.0	---	---	36.7	4	20	6.0	12.0
7.	3.4	5.1	9.5	---	---	10.1	5	60	2.5	5.5
8.	3.4	5.0	21.0	---	---	50.1	4	45	4.0	7.5
9.	3.5	5.1	29.0	---	---	28.7	4	10	5.0	8.5
10.	3.5	5.1	43.0	---	---	49.6	4	1	8.5	13.5
11.	3.5	5.1	43.0	---	---	41.9	4	10	9.0	11.5
12.	3.4	5.1	22.0	---	---	44.3	4	10	4.5	7.5
13.	3.4	5.0	39.0	---	---	59.6	5	85	4.5	9.0
14.	3.5	5.1	38.0	---	---	21.7	5	60	5.5	8.0
15.	3.5	5.1	48.0	---	---	38.9	5	45	7.0	12.5
16.	3.4	5.0	21.5	---	---	19.0	5	65	3.5	7.0
17.	3.4	---	14.0	---	---	29.0	3	2	4.0	---
18.	3.5	5.1	31.0	---	---	48.2	4	10	7.0	12.0
19.	3.4	5.1	24.0	---	---	17.0	4	50	9.5	7.0
20.	3.4	5.1	28.0	---	---	36.0	4	40	5.5	8.5

TABLE IV

Artemisia tridentata   Study Area Demer   Date 15 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.6	5.5	33.0	---	---	17.0	3	15	7.0	20.0
2.	3.6	5.5	31.0	---	---	39.5	3	15	9.0	16.0
3.	3.6	---	18.0	---	---	36.0	3	85	7.5	---
4.	3.6	---	14.5	---	---	37.5	5	75	5.5	---
5.	3.6	5.3	24.0	---	---	43.3	5	60	4.5	8.0
6.	3.6	5.4	27.5	---	---	36.7	4	20	5.0	10.0
7.	3.6	---	9.5	---	---	10.1	5	60	4.0	---
8.	3.6	5.5	33.5	---	---	50.1	4	45	4.5	15.5
9.	3.6	5.5	35.0	---	---	28.7	4	10	6.5	16.0
10.	3.6	5.5	52.0	---	---	49.6	4	1	11.5	21.0
11.	3.6	5.5	36.0	---	---	41.9	4	10	12.5	18.2
12.	3.6	5.4	29.0	---	---	44.3	4	10	14.0	11.5
13.	3.7	5.4	43.0	---	---	59.6	5	85	4.0	9.0
14.	3.6	5.4	41.5	---	---	21.7	5	60	7.5	17.0
15.	3.6	5.5	54.5	---	---	38.9	5	45	9.5	23.5
16.	3.6	---	21.2	---	---	14.0	5	65	4.5	---
17.	3.6	---	15.5	---	---	29.0	3	2	5.0	---
18.	3.6	5.5	35.0	---	---	48.2	4	10	7.0	18.0
19.	3.6	5.5	44.5	---	---	17.0	4	50	8.0	18.0
20.	3.6	5.5	36.5	---	---	36.0	4	40	5.5	17.0

TABLE IV

Artemisia tridentata Study Area Demer Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.1	5.6	34.0	---	---	17.0	3	15	9.0	17.5
2.	4.1	5.6	33.5	---	---	34.5	3	15	9.5	16.0
3.	4.1	---	18.5	---	---	36.0	3	85	7.5	---
4.	4.1	---	15.5	---	---	37.5	5	75	6.0	---
5.	4.2	5.6	21.0	---	---	43.3	5	60	5.5	8.0
6.	4.1	5.6	32.5	---	---	36.7	4	20	8.0	13.5
7.	4.2	---	9.0	---	---	10.1	5	60	5.0	---
8.	4.1	5.6	33.0	---	---	50.1	4	45	8.0	15.5
9.	4.2	5.6	38.0	---	---	28.7	4	10	8.5	17.0
10.	4.2	5.6	51.5	---	---	49.6	4	1	12.0	22.0
11.	4.2	5.6	37.0	---	---	41.9	4	10	10.0	20.0
12.	4.2	5.4	30.0	---	---	44.3	4	10	14.5	11.5
13.	4.2	5.5	45.0	---	---	59.6	5	85	4.0	9.5
14.	4.2	5.5	45.0	---	---	21.7	5	60	7.5	18.5
15.	4.2	5.5	55.0	---	---	38.9	5	45	11.0	24.5
16.	4.1	---	21.0	---	---	19.0	5	65	7.0	---
17.	4.1	---	16.0	---	---	29.0	3	2	5.0	---
18.	4.2	5.6	35.0	---	---	48.2	4	10	7.5	13.5
19.	4.2	5.6	29.5	---	---	17.0	4	50	7.5	17.5
20.	4.2	5.5	37.5	---	---	36.0	4	40	9.0	17.5

TABLE IV

Artemisia tridentata

Study Area Demer

Date 15 October 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.4	13.5	34.0	---	---	17.0	3	15	9.0	17.5
2.	14.4	13.5	33.5	---	---	34.5	3	15	9.5	16.0
3.	14.4	---	18.5	---	---	36.0	3	85	7.5	---
4.	14.4	13.5	15.5	---	---	37.5	5	75	6.0	---
5.	14.5	13.5	21.0	---	---	43.0	5	60	5.5	8.0
6.	14.4	13.5	32.9	---	---	36.7	4	20	8.0	13.5
7.	14.5	---	9.0	---	---	10.1	5	60	5.0	---
8.	14.4	13.5	33.0	---	---	50.1	4	45	8.0	15.5
9.	14.5	13.4	38.0	---	---	28.7	4	10	8.5	17.0
10.	14.5	13.5	51.5	---	---	49.6	4	1	12.0	22.0
11.	14.5	13.5	37.0	---	---	41.9	4	10	10.0	20.0
12.	14.5	13.4	30.0	---	---	44.3	4	10	14.5	11.5
13.	14.5	13.5	45.0	---	---	59.6	5	85	4.0	9.5
14.	14.5	13.4	45.0	---	---	21.7	5	60	7.5	18.5
15.	14.5	13.4	55.2	---	---	38.9	5	45	11.0	24.5
16.	14.4	---	21.0	---	---	19.0	5	65	7.0	---
17.	14.4	---	16.0	---	---	29.0	3	2	5.0	---
18.	14.5	13.5	35.5	---	---	48.2	4	10	7.5	13.5
19.	14.5	13.5	29.5	---	---	17.0	4	50	7.5	17.5
20.	14.5	13.5	37.5	---	---	36.0	4	40	9.0	17.5

TABLE IV

Artemisia tridentata Study Area Demer Date 14 November 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.8	15.9	34.0	---	---	17.0	3	15	9.0	17.5
2.	14.8	15.9	33.5	---	---	34.5	3	15	9.5	16.0
3.	14.8	---	18.5	---	---	36.0	3	85	7.5	---
4.	14.8	15.9	15.5	---	---	37.5	5	75	6.0	---
5.	14.8	15.9	21.0	---	---	43.0	5	60	5.5	8.0
6.	14.8	15.9	32.9	---	---	36.7	4	20	8.0	13.5
7.	14.8	---	9.0	---	---	10.1	5	60	5.0	---
8.	14.8	15.9	33.0	---	---	50.1	4	45	8.0	15.5
9.	14.8	15.9	38.0	---	---	28.7	4	10	8.5	17.0
10.	14.8	15.9	51.5	---	---	49.6	4	1	12.0	22.0
11.	14.8	15.9	37.0	---	---	41.9	4	10	10.0	20.0
12.	14.8	15.9	30.0	---	---	44.3	4	10	14.5	11.5
13.	14.8	15.9	45.0	---	---	59.6	5	85	4.0	9.5
14.	14.8	15.9	45.0	---	---	21.7	5	60	7.5	18.5
15.	14.8	15.9	55.2	---	---	38.9	5	45	11.0	24.5
16.	14.8	---	21.0	---	---	19.0	5	65	7.0	---
17.	14.8	---	16.0	---	---	29.0	3	2	5.0	---
18.	14.8	15.9	35.5	---	---	48.2	4	10	7.5	13.5
19.	14.8	15.9	29.5	---	---	17.0	4	50	7.5	17.5
20.	14.8	15.9	37.5	---	---	36.0	4	40	9.0	17.5

Many flower heads did not produce seed because of lack of moisture in early fall.

TABLE IV

Artemisia tridentata　　Study Area　Demer　　Date　24 December 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.8	15.9	34.0	---	---	17.0	3	15	9.0	17.5
2.	14.8	15.9	33.5	---	---	34.5	3	15	9.5	16.0
3.	14.8	---	18.5	---	---	36.0	3	85	7.5	---
4.	14.8	---	15.5	---	---	37.5	5	75	6.0	---
5.	14.8	15.9	21.0	---	---	43.0	5	60	5.5	8.0
6.	14.8	15.9	32.5	---	---	36.7	4	20	8.0	13.5
7.	14.8	---	9.0	---	---	10.1	5	60	5.0	---
8.	14.8	15.9	33.0	---	---	50.1	4	45	8.0	15.5
9.	14.8	15.9	38.0	---	---	28.7	4	10	8.5	17.0
10.	14.8	15.9	51.5	---	---	49.6	4	1	12.0	22.0
11.	14.8	15.9	37.0	---	---	41.9	4	10	10.0	20.0
12.	14.8	15.9	30.0	---	---	44.3	4	10	14.5	11.5
13.	14.8	15.9	45.0	---	---	59.6	5	85	4.0	9.5
14.	14.8	15.9	45.0	---	---	21.7	5	60	7.5	18.5
15.	14.8	15.9	55.0	---	---	38.9	5	45	11.0	24.5
16.	14.8	---	21.0	---	---	19.0	5	65	7.0	---
17.	14.8	---	16.0	---	---	29.0	3	2	5.0	---
18.	14.8	15.9	35.0	---	---	48.2	4	10	7.5	13.5
19.	14.8	15.9	29.5	---	---	17.0	4	50	7.5	17.5
20.	14.8	15.9	37.5	---	---	36.0	4	40	9.0	17.5

TABLE IV

Agropyron smithii — Study Area Farson — Date 6 February 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.								
6.		NO						
7.								
8.			NEW					
9.								
10.				GRO	WTH			
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Farson Date 29 March 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	17.0	---	.3	19.7	---	---	3
2.	17.0	---	.1	5.5	---	---	1
3.	17.0	---	.2	18.1	---	---	3
4.	17.0	---	.2	17.0	---	---	2
5.	17.0	17.0	.2	16.6	---	---	2
6.	17.0	---	.2	19.0	15.3	---	2
7.	7.0	---	.2	14.0	---	---	1
8.	17.0	---	.1	5.3	---	---	1
9.	17.0	17.0	.1	13.5	---	---	1
10.	17.0	---	.2	16.1	---	---	2
11.	17.0	---	.3	11.3	---	---	2
12.	17.0	---	.2	18.6	---	---	5
13.	17.0	---	.2	7.3	---	---	1
14.	17.0	---	.1	18.5	---	---	1
15.	17.0	17.0	.2	20.5	---	---	1
16.	17.0	---	.2	18.2	---	---	1
17.	17.0	---	.1	5.5	---	---	1
18.	17.0	---	.1	9.8	---	---	1
19.	17.0	---	.1	12.5	---	---	1
20.	17.0	---	.1	12.1	---	---	1

TABLE IV

Agropyron smithii Study Area Farson Date 26 April 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	17.0	17.0	---	---	---	---	---
2.	17.0	17.0	---	---	---	---	---
3.	17.0	17.0	---	---	---	---	---
4.	1.2	---	.1	3.0	---	---	1
5.	1.3	---	.1	4.8	---	---	1
6.	17.0	17.0	---	---	---	---	---
7.	1.3	---	.1	4.7	---	---	1
8.	17.0	17.0	---	---	---	---	---
9.	1.2	---	.1	2.3	---	---	1
10.	17.0	17.0	---	---	---	---	---
11.	17.0	17.0	---	---	---	---	---
12.	17.0	17.0	---	---	---	---	---
13.	17.0	17.0	---	---	---	---	---
14.	17.0	17.0	---	---	---	---	---
15.	1.2	---	.1	4.5	---	---	1
16.	17.0	17.0	---	---	---	---	---
17.	17.0	17.0	---	---	---	---	---
18.	17.0	17.0	---	---	---	---	---
19.	17.0	17.0	---	---	---	---	---
20.	1.1	---	.1	2.0	---	---	1

TABLE IV

Agropyron smithii Study Area Farson Date 19 May 1976

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	1.8	---	.1	11.2	---	---	2
2.	1.2	---	.1	2.2	---	---	1
3.	3.1	---	.3	14.1	---	---	3
4.	3.2	---	.3	11.1	---	---	1
5.	3.2	---	.2	8.6	---	---	2
6.	2.5	---	.2	11.8	---	---	3
7.	3.2	---	.2	10.2	---	---	2
8.	2.8	---	.2	12.0	---	---	1
9.	2.8	---	.3	11.4	---	---	1
10.	2.6	---	.2	9.3	---	---	2
11.	2.7	---	.3	10.7	---	---	1
12.	2.2	---	.2	9.0	---	---	1
13.	2.2	---	.2	9.5	---	---	1
14.	2.4	---	.3	10.6	---	---	1
15.	2.9	---	.3	15.3	---	---	1
16.	2.5	---	.2	8.9	---	---	1
17.	3.6	---	.2	12.2	---	---	2
18.	3.2	---	.2	11.1	---	---	1
19.	2.7	---	.2	7.7	---	---	1
20.	2.1	---	.1	8.5	---	---	1

TABLE IV

Agropyron smithii Study Area Farson Date 30 May 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	2.8	---	.1	15.5	---	---	2	
2.	2.3	---	.1	4.1	---	---	1	
3.	3.5	---	.3	15.0	---	---	3	
4.	3.8	---	.3	11.9	---	---	1	
5.	2.9	---	.2	9.5	---	---	2	
6.	2.9	---	.2	14.0	---	---	3	
7.	2.9	---	.2	10.6	---	---	2	
8.	3.3	---	.3	14.7	---	---	1	
9.	3.4	---	.3	13.6	---	---	1	
10.	2.8	---	.2	11.9	---	---	2	
11.	2.9	---	.3	13.5	---	---	1	
12.	2.9	---	.2	10.0	---	---	1	
13.	2.9	---	.2	9.8	---	---	1	
14.	2.9	---	.2	9.5	---	---	1	Dying
15.	3.5	---	.3	15.5	---	---	1	
16.	3.0	---	.2	12.4	---	---	1	
17.	4.3	---	.3	14.6	---	---	1	
18.	3.7	---	.2	13.9	---	---	1	
19.	3.3	---	.2	11.4	---	---	1	Dying
20.	2.9	---	.2	8.6	---	---	1	

TABLE IV

Agropyron smithii Study Area Farson Date 11 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	4.2	---	.2	19.6	---	---	2	
2.	3.7	---	.1	4.5	---	---	1	
3.	4.2	---	.3	22.0	---	---	3	
4.	4.0	---	.3	16.0	---	---	1	
5.	3.6	---	.2	13.0	---	---	2	
6.	3.7	---	.2	17.4	---	---	3	
7.	3.7	---	.2	12.2	---	---	2	
8.	4.2	---	.3	18.9	---	---	1	
9.	4.3	---	.3	20.1	---	---	1	
10.	3.6	---	.2	14.1	---	---	2	
11.	4.2	---	.3	21.6	---	---	1	
12.	3.5	---	.2	14.8	---	---	1	
13.	3.8	---	.2	12.5	---	---	1	
14.	3.9	---	.2	18.0	---	---	1	Dying
15.	4.0	---	.3	21.7	---	---	1	
16.	3.9	---	.2	15.3	---	---	1	
17.	4.3	---	.3	21.6	---	---	2	
18.	3.8	---	.2	16.0	---	---	1	
19.	3.3	---	.1	10.7	---	---	1	Dying
20.	3.6	---	.2	12.9	---	---	1	

TABLE IV

Agropyron smithii Study Area Farson Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	3.9	---	.1	17.6	---	---	2
2.	4.1	---	.2	6.0	---	---	1
3.	4.0	---	.3	20.6	---	---	3
4.	4.3	---	.4	20.0	---	---	1
5.	4.0	---	.2	13.6	---	---	2
6.	4.1	---	.3	18.2	---	---	3
7.	4.2	---	.3	15.3	---	---	2
8.	4.4	---	.3	19.4	---	---	1
9.	4.3	---	.3	20.2	---	---	1
10.	3.8	---	.2	14.9	---	---	2
11.	4.0	---	.3	23.5	---	---	1
12.	3.8	---	.3	14.9	---	---	1
13.	4.2	---	.3	16.2	---	---	1
14.	3.9	---	.1	21.2	---	---	1
15.	4.0	---	.3	24.7	---	---	1
16.	3.7	---	.2	18.5	---	---	1
17.	4.2	---	.3	22.9	---	---	2
18.	4.3	---	.3	18.8	---	---	1
19.	4.1	---	.1	11.2	---	---	1
20.	4.1	---	.2	16.1	---	---	1

TABLE IV

Agropyron smithii Study Area Farson Date 4 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.7	---	.1	19.4	---	---	2
2.	14.5	---	.1	6.1	---	---	1
3.	14.3	---	.2	21.0	---	---	3
4.	14.2	2.3	.3	21.5	---	---	1
5.	14.4	---	.2	13.8	---	---	2
6.	14.4	---	.2	21.0	---	---	3
7.	14.3	---	.2	15.8	---	---	2
8.	14.3	---	.3	20.2	---	---	1
9.	14.2	---	.2	21.4	---	---	1
10.	14.3	---	.1	14.5	---	---	2
11.	14.3	---	.2	24.2	---	---	1
12.	14.5	---	.2	16.0	---	---	1
13.	14.4	---	.2	21.3	---	---	1
14.	14.3	---	.2	33.5	---	---	1
15.	14.3	---	.2	25.2	---	---	1
16.	14.3	---	.2	19.0	---	---	1
17.	14.3	---	.2	23.1	---	---	2
18.	14.3	---	.2	18.8	---	---	1
19.	14.7	---	.1	10.4	---	---	1
20.	14.4	---	.1	16.6	---	---	1

TABLE IV

Agropyron smithii Study Area Farson Date 17 October 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH CM.	MAX. LEAF HGTH. CM.	MAX. SPIKE HGTH. CM.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.9	---	.1	19.4	---	---	2	
2.	14.9	---	.1	6.1	---	---	1	
3.	14.9	---	.2	21.0	---	---	3	
4.	14.9	---	.3	21.5	---	---	1	Died in boot
5.	14.9	---	.2	13.8	---	---	2	
6.	14.9	---	.2	21.0	---	---	3	
7.	14.9	---	.2	15.8	---	---	2	
8.	14.9	---	.2	20.2	---	---	1	
9.	14.9	---	.2	21.4	---	---	1	
10.	14.9	---	.1	14.5	---	---	2	
11.	14.9	---	.2	24.2	---	---	1	
12.	14.9	---	.2	16.0	---	---	1	
13.	14.9	---	.2	21.3	---	---	1	
14.	14.9	---	.2	33.5	---	---	1	
15.	14.9	---	.2	25.2	---	---	1	
16.	14.9	---	.2	19.0	---	---	1	
17.	14.9	---	.3	23.1	---	---	1	
18.	14.9	---	.2	18.8	---	---	2	
19.	14.9	---	.1	10.4	---	---	1	
20.	14.9	---	.1	16.6	---	---	1	

TABLE IV

Agropyron smithii Study Area Farson Date 26 November 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	17.0	---	.1	11.1	---	---	2
2.	17.0	---	.1	2.2	---	---	1
3.	17.0	---	.3	14.1	---	---	3
4.	17.0	17.0	.3	11.1	---	---	1
5.	17.0	---	.2	8.6	---	---	2
6.	17.0	---	.2	11.8	---	---	3
7.	17.0	---	.2	10.2	---	---	2
8.	17.0	---	.2	12.0	---	---	1
9.	17.0	---	.3	11.4	---	---	1
10.	17.0	---	.2	9.3	---	---	2
11.	17.0	---	.3	10.7	---	---	1
12.	17.0	---	.2	9.0	---	---	1
13.	17.0	---	.2	9.5	---	---	1
14.	17.0	---	.3	10.6	---	---	1
15.	17.0	---	.3	15.3	---	---	1
16.	17.0	---	.2	8.7	---	---	1
17.	17.0	---	.2	12.2	---	---	2
18.	17.0	---	.2	11.1	---	---	1
19.	17.0	---	.2	7.7	---	---	1
20.	17.0	---	.1	8.5	---	---	1

TABLE IV

Artemisia tridentata

Study Area Farson

Date 6 February 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.					NO						
7.						NEW					
8.							GR	OWTH			
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Farson Date 29 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.				NO							
5.											
6.					NEW						
7.											
8.						GROWTH					
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Farson Date 26 April 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.				NO							
5.											
6.					NEW						
7.											
8.						GRO	WTH				
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Farson Date 19 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	2.2	---	21.6	---	---	36.0	3	20	---	---
2.	2.0	---	12.0	---	---	26.5	3	15	---	---
3.	2.2	---	37.0	---	---	65.0	4	30	---	---
4.	2.0	---	19.0	---	---	24.0	3	20	---	---
5.	2.0	---	32.7	---	---	59.5	5	55	---	---
6.	2.1	---	35.0	---	---	37.5	3	10	---	---
7.	2.2	---	10.3	---	---	15.0	2	1	---	---
8.	2.2	---	27.6	---	---	44.0	4	15	---	---
9.	2.2	---	19.4	---	---	42.0	3	5	---	---
10.	2.0	---	16.0	---	---	30.0	5	55	---	---
11.	2.2	---	29.5	---	---	47.0	4	15	---	---
12.	2.3	---	29.2	---	---	50.0	4	10	---	---
13.	2.0	---	19.5	---	---	32.5	5	15	---	---
14.	2.2	---	23.5	---	---	41.0	4	25	---	---
15.	2.0	---	19.0	---	---	15.0	3	5	---	---
16.	2.2	---	14.5	---	---	18.5	3	5	---	---
17.	2.1	---	21.0	---	---	12.5	4	15	---	---
18.	2.0	---	15.2	---	---	38.5	4	60	---	---
19.	2.2	---	23.6	---	---	24.5	4	25	---	---
20.	2.2	---	17.8	---	---	33.0	3	10	---	---

TABLE IV

Artemisia tridentata Study Area Farson Date 30 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.1	---	21.0	---	---	36.0	3	20	1.5	---	
2.	3.0	---	10.8	---	---	26.5	3	15	1.0	---	
3.	3.1	---	36.0	---	---	65.0	4	30	1.0	---	
4.	3.0	---	18.5	---	---	24.0	3	20	1.0	---	
5.	3.0	---	33.5	---	---	59.5	5	55	1.0	---	
6.	3.0	---	24.5	---	---	37.5	3	10	1.0	---	
7.	3.0	---	10.5	---	---	15.0	2	1	1.0	---	
8.	3.0	---	27.0	---	---	47.0	4	15	1.0	---	
9.	3.1	---	15.0	---	---	42.0	3	5	1.5	---	
10.	3.0	---	16.0	---	---	30.0	5	55	.5	---	dying
11.	3.0	---	29.5	---	---	47.0	4	15	1.0	---	
12.	3.2	---	31.0	---	---	50.0	4	10	3.0	---	
13.	3.1	---	21.0	---	---	32.5	5	15	1.5	---	
14.	3.2	---	23.0	---	---	41.0	4	25	2.0	---	
15.	3.1	---	19.0	---	---	15.0	3	5	1.0	---	
16.	3.1	---	13.5	---	---	18.5	3	5	1.0	---	
17.	3.1	---	26.0	---	---	12.5	4	15	1.5	---	
18.	3.1	---	20.0	---	---	38.5	4	60	1.0	---	
19.	3.1	---	25.5	---	---	24.5	4	25	1.5	---	
20.	3.1	---	17.0	---	---	33.0	3	10	1.5	---	

TABLE IV

Artemisia tridentata   Study Area Farson   Date 11 June 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	3.2	---	21.0	---	---	36.0	3	20	2.0	---
2.	3.2	---	16.0	---	---	26.5	3	15	2.0	---
3.	3.2	---	34.5	---	---	55.0	4	30	1.5	---
4.	3.3	---	18.0	---	---	24.0	3	20	1.5	---
5.	3.2	---	37.0	---	---	59.5	5	55	2.0	---
6.	3.2	---	27.0	---	---	37.5	3	10	1.5	---
7.	3.2	---	11.5	---	---	15.0	2	1	1.5	---
8.	3.2	---	20.5	---	---	44.0	4	15	1.5	---
9.	3.3	---	16.0	---	---	42.0	3	5	2.0	---
10.	3.2	---	15.5	---	---	30.0	5	50	1.0	---
11.	3.3	---	30.0	---	---	47.0	4	15	2.5	---
12.	3.3	---	31.5	---	---	50.0	4	10	2.5	---
13.	3.3	---	20.0	---	---	32.5	5	15	2.0	---
14.	3.3	---	22.0	---	---	41.0	4	25	2.5	---
15.	3.2	---	18.0	---	---	15.0	3	5	1.5	---
16.	3.3	---	14.5	---	---	18.5	3	5	2.0	---
17.	3.3	---	26.5	---	---	12.5	4	15	2.0	---
18.	3.3	---	19.5	---	---	38.5	4	60	2.0	---
19.	3.3	---	26.5	---	---	24.5	4	25	3.0	---
20.	3.3	---	15.0	---	---	33.0	3	10	2.0	---

TABLE IV

Artemisia tridentata — Study Area Farson — Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.4	5.0	23.0	---	---	36.0	3	20	2.5	3.0
2.	3.4	---	17.0	---	---	26.5	3	15	2.0	---
3.	3.4	5.1	58.0	---	---	65.0	4	30	2.5	4.0
4.	3.4	---	18.5	---	---	24.0	3	20	1.5	---
5.	3.4	5.1	37.5	---	---	59.5	5	55	2.5	3.5
6.	3.4	5.0	27.0	---	---	37.5	3	10	1.0	2.5
7.	3.4	---	14.0	---	---	15.0	2	1	1.5	---
8.	3.4	5.0	31.5	---	---	44.0	4	15	1.5	2.5
9.	3.4	5.1	12.0	---	---	42.0	3	5	2.0	4.0
10.	3.4	---	16.5	---	---	30.0	5	55	1.5	---
11.	3.4	5.0	31.0	---	---	47.0	4	15	2.0	4.5
12.	3.4	5.0	33.0	---	---	50.0	4	10	1.5	2.5
13.	3.4	5.0	22.0	---	---	32.5	5	15	2.5	3.0
14.	3.4	5.1	28.0	---	---	4.0	4	2.5	2.5	5.0
15.	3.4	5.0	18.0	---	---	15.0	3	15	2.5	2.5
16.	3.4	5.1	15.5	---	---	18.5	3	5	2.0	3.0
17.	3.4	5.0	26.0	---	---	12.5	4	15	1.5	3.5
18.	3.4	5.0	21.0	---	---	38.5	4	60	6.5	3.0
19.	3.4	5.1	24.5	---	---	24.5	4	2.5	2.0	3.0
20.	3.4	---	17.5	---	---	33.0	3	10	2.0	---

TABLE IV

Artemisia tridentata Study Area Farson Date 4 July 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	4.1	5.7	24.7	---	---	36.0	3	20	2.0	8.0
2.	4.1	---	17.0	---	---	26.5	3	15	2.0	---
3.	4.1	5.6	36.0	---	---	65.0	4	30	2.5	8.5
4.	4.2	---	20.0	---	---	24.0	3	20	2.0	---
5.	4.1	5.7	38.0	---	---	59.5	5	55	4.0	15.0
6.	4.2	5.7	34.0	---	---	37.5	3	10	4.5	10.5
7.	4.2	---	10.5	---	---	15.0	2	1	1.5	---
8.	4.2	---	27.5	---	---	44.0	4	15	1.5	---
9.	4.1	5.7	16.5	---	---	42.0	3	5	2.0	6.5
10.	4.1	---	17.5	---	---	30.0	5	55	1.5	---
11.	4.1	5.7	38.0	---	---	47.0	4	15	6.5	13.5
12.	4.1	5.7	41.0	---	---	50.0	4	10	4.5	14.5
13.	4.1	5.6	25.5	---	---	32.5	5	15	3.5	10.5
14.	4.1	5.7	31.5	---	---	41.0	4	25	4.0	12.0
15.	4.1	5.6	23.5	---	---	15.0	3	15	3.0	8.5
16.	4.2	5.6	19.0	---	---	18.5	3	5	2.5	9.0
17.	4.2	5.6	28.5	---	---	12.5	4	15	3.0	4.0
18.	4.2	---	19.0	---	---	38.5	4	60	2.5	---
19.	4.2	5.7	27.5	---	---	24.5	4	25	4.0	9.0
20.	4.2	---	17.0	---	---	33.0	3	10	2.0	---

TABLE IV

Artemisia tridentata — Study Area Farson — Date 17 October 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	14.0	10.5	24.7	---	---	36.0	3	5	2.0	8.0
2.	14.0	---	17.0	---	---	26.5	3	10	2.0	---
3.	14.0	10.4	36.0	---	---	65.0	4	15	2.5	8.5
4.	14.1	---	20.0	---	---	24.0	3	25	2.0	---
5.	14.0	10.5	38.0	---	---	59.5	4	15	4.0	15.0
6.	14.1	10.5	34.0	---	---	37.5	4	10	4.5	10.5
7.	14.1	---	10.5	---	---	15.0	2	2	1.5	---
8.	14.1	---	27.5	---	---	44.0	4	5	1.5	---
9.	14.0	10.5	16.5	---	---	42.0	3	5	2.0	6.5
10.	14.0	---	17.5	---	---	30.0	5	5	1.5	---
11.	14.0	10.5	38.0	---	---	47.0	4	5	4.5	13.5
12.	14.0	10.5	41.0	---	---	50.0	3	2	4.5	14.5
13.	14.0	10.4	25.5	---	---	32.5	4	15	3.5	10.5
14.	14.0	10.5	31.5	---	---	41.0	4	20	4.0	12.0
15.	14.0	10.4	23.5	---	---	15.0	3	10	3.0	8.5
16.	14.1	10.4	19.0	---	---	18.5	3	5	2.5	9.0
17.	14.1	10.4	21.0	---	---	12.5	4	15	2.0	4.0
18.	14.1	---	19.0	---	---	38.5	4	35	2.5	---
19.	14.1	10.5	27.5	---	---	24.5	3	15	4.0	9.0
20.	14.1	---	17.0	---	---	33.0	3	5	2.0	---

TABLE IV

Artemisia tridentata Study Area Farson Date 26 November 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	14.8	15.9	24.7	---	---	36.0	3	5	2.0	8.0	
2.	14.8	---	17.0	---	---	26.5	3	10	2.0	---	
3.	14.8	15.9	36.0	---	---	65.0	4	15	2.5	8.5	
4.	14.8	---	20.0	---	---	24.0	3	25	2.0	---	
5.	14.8	15.9	38.0	---	---	59.5	4	15	4.0	15.0	
6.	14.8	15.9	34.0	---	---	37.5	4	10	4.5	10.5	
7.	14.8	---	10.5	---	---	15.0	2	2	1.5	---	
8.	14.8	---	27.5	---	---	44.0	4	5	1.5	---	
9.	14.8	15.9	16.5	---	---	42.0	3	5	2.0	6.5	
10.	14.8	---	17.5	---	---	30.0	5	5	1.5	---	
11.	14.8	15.9	38.0	---	---	47.0	4	5	4.5	13.5	
12.	14.8	15.9	41.0	---	---	50.0	3	2	4.5	14.5	
13.	14.8	15.9	25.5	---	---	32.5	4	15	3.5	10.5	
14.	14.8	15.9	31.5	---	---	41.0	4	20	4.0	12.0	
15.	14.8	15.9	23.5	---	---	15.0	3	10	3.0	8.5	
16.	14.8	15.9	19.0	---	---	18.5	3	5	2.5	9.0	
17.	14.8	15.9	21.0	---	---	12.5	4	15	2.0	4.0	
18.	14.8	---	19.0	---	---	38.5	4	35	2.5	---	
19.	14.8	15.9	27.5	---	---	24.5	3	15	4.0	9.0	
20.	14.8	---	17.0	---	---	33.0	3	5	2.0	---	

TABLE IV

Agropyron smithii Study Area Horse Creek Date 24 January 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.								
6.		NO						
7.								
8.			NEW					
9.								
10.				GRO	WTH			
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Horse Creek Date 12 March 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.								
6.		NO						
7.								
8.			NEW					
9.								
10.				GROWTH				
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Horse Creek Date 28 May 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	4.1	---	.4	20.4	---	---	2	
2.	4.3	---	.4	13.0	---	---	1	
3.	3.3	---	.3	14.6	---	---	2	Eaten
4.	3.3	---	.3	13.1	---	---	1	
5.	3.8	---	.4	15.3	---	---	2	
6.	3.7	---	.3	13.6	---	---	3	
7.	4.2	---	.3	12.5	---	---	1	
8.	4.7	---	.4	16.8	---	---	1	
9.	3.8	---	.4	13.6	---	---	3	
10.	4.2	---	.4	19.7	---	---	2	
11.	3.8	---	.4	19.3	---	---	4	
12.	4.2	---	.4	17.5	---	---	1	
13.	3.3	---	.2	15.7	---	---	1	
14.	4.1	---	.3	13.3	---	---	1	
15.	4.2	---	.4	13.7	---	---	1	
16.	4.1	---	.4	17.0	---	---	1	
17.	4.2	---	.4	16.0	---	---	2	
18.	3.7	---	.3	12.8	---	---	1	
19.	3.3	---	.2	14.5	---	---	1	
20.	4.1	---	.5	17.0	---	---	3	

TABLE IV

Agropyron smithii Study Area Horse Creek Date 9 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.6	5.0	.4	23.5	---	---	2
2.	4.7	5.1	.3	16.8	---	---	1
3.	3.9	---	.2	15.0	---	---	2
4.	4.3	---	.3	15.7	---	---	1
5.	4.6	5.0	.4	18.3	---	---	2
6.	4.4	---	.3	15.1	---	---	3
7.	3.8	---	.3	16.0	---	---	1
8.	4.5	---	.5	2.2	---	---	1
9.	4.6	5.0	.4	15.7	---	---	3
10.	4.6	---	.5	23.5	---	---	2
11.	4.4	---	.3	22.5	---	---	4
12.	2.9	---	.1	13.2	---	---	1
13.	4.4	---	.4	28.0	---	---	1
14.	4.0	---	.3	15.3	---	---	1
15.	4.3	---	.4	18.1	---	---	1
16.	4.2	---	.4	18.5	---	---	1
17.	4.6	5.1	.5	19.3	---	---	2
18.	4.4	5.2	.5	18.7	---	---	1
19.	2.9	---	.2	15.8	---	---	1
20.	4.5	5.2	.6	20.9	---	---	3

TABLE IV

Agropyron smithii Study Area Horse Creek Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.6	5.2	.4	26.5	---	---	2
2.	4.3	---	.3	12.0	---	---	1
3.	4.4	---	.3	14.5	---	---	2
4.	4.2	---	.3	15.1	---	---	1
5.	4.4	---	.4	22.6	---	---	2
6.	4.5	5.0	.4	23.2	---	---	3
7.	4.6	---	.4	18.2	---	---	1
8.	4.6	5.3	14	24.3	---	---	1
9.	4.4	---	.4	20.1	---	---	3
10.	4.5	5.3	.4	30.0	---	---	2
11.	4.5	---	.2	17.5	---	---	4
12.	4.4	---	.2	13.3	---	---	1
13.	4.0	---	.2	19.6	---	---	1
14.	4.5	---	.3	16.3	---	---	1
15.	4.5	5.2	.4	19.8	---	---	1
16.	4.6	5.1	.4	20.1	---	---	1
17.	4.5	5.0	.4	21.2	---	---	2
18.	4.5	5.1	.3	14.2	---	---	1
19.	4.1	---	.2	15.1	---	---	1
20.	4.7	5.8	.5	24.5	---	---	3

TABLE IV

Agropyron smithii   Study Area Horse Creek   Date 15 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.0	---	.3	25.0	---	---	2	
2.	14.3	---	.2	17.0	---	---	1	
3.	14.1	---	.4	21.3	---	---	2	Eaten
4.	14.1	---	.2	16.0	---	---	1	
5.	14.0	---	.3	23.2	---	---	2	
6.	14.0	---	.2	15.9	---	---	3	
7.	14.1	---	.3	17.8	---	---	1	
8.	14.1	---	.3	24.6	---	---	1	
9.	14.1	---	.2	21.3	---	---	3	
10.	14.1	---	.3	30.7	---	---	2	
11.	14.7	---	.2	15.4	---	---	4	
12.	14.4	---	.1	13.4	---	---	1	
13.	14.3	---	.2	20.1	---	---	1	
14.	14.1	---	.2	11.4	---	---	1	Eaten
15.	14.1	---	.3	21.6	---	---	1	
16.	14.1	---	.4	21.5	---	---	1	
17.	14.0	---	.3	25.2	---	---	2	
18.	14.2	---	.2	15.0	---	---	1	
19.	14.8	---	.2	15.7	---	---	1	
20.	14.1	9.5	.4	26.6	---	---	3	

TABLE IV

Agropyron smithii Study Area Horse Creek Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.0	---	.2	24.3	---	---	2	
2.	14.9	---	.1	17.0	---	---	1	
3.	14.9	---	.1	14.6	---	---	2	
4.	14.7	---	.1	16.3	---	---	1	
5.	14.5	---	.3	23.5	---	---	2	
6.	14.5	---	.2	17.0	---	---	3	
7.	14.7	---	.2	16.8	---	---	1	
8.	14.7	---	.2	25.1	---	---	1	
9.	14.4	---	.2	19.0	---	---	3	
10.	---	---	---	---	---	---	---	Dead
11.	14.5	---	.2	23.4	---	---	4	
12.	14.8	---	.1	13.2	---	---	1	
13.	14.6	---	.2	30.1	---	---	1	
14.	14.5	---	.2	16.4	---	---	1	
15.	14.5	---	.2	20.5	---	---	1	
16.	14.4	---	.3	21.7	---	---	1	
17.	14.6	---	.2	18.2	---	---	2	
18.	14.7	---	.2	15.1	---	---	1	
19.	14.8	---	.1	14.0	---	---	1	
20.	14.9	13.0	.3	26.4	33.0	9	3	

TABLE IV

Agropyron smithii Study Area Horse Creek Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
1.	14.9	---	.2	29.3	---	---	2	
2.	14.5	---	.1	17.0	---	---	1	
3.	14.9	---	.1	14.6	---	---	2	
4.	14.9	---	.1	16.3	---	---	1	
5.	14.9	---	.3	23.5	---	---	2	
6.	14.9	---	.2	17.0	---	---	3	
7.	14.9	---	.2	16.8	---	---	1	
8.	14.9	---	.2	25.1	---	---	1	
9.	14.9	---	.2	19.0	---	---	3	
10.	---	---	---	---	---	---	---	Dead
11.	14.9	---	.2	23.4	---	---	4	
12.	14.9	---	.1	13.2	---	---	1	
13.	14.9	---	.2	30.1	---	---	1	
14.	14.9	---	.2	16.4	---	---	1	
15.	14.9	---	.2	20.5	---	---	1	
16.	14.9	---	.3	21.7	---	---	1	
17.	14.9	---	.2	18.2	---	---	2	
18.	14.9	---	.2	15.1	---	---	1	
19.	14.9	---	.1	14.8	---	---	1	
20.	14.9	15.0	.3	26.4	33.1	5	3	

TABLE IV

Agropyron smithii Study Area Horse Creek Date 15 November 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
1.	17.0	---	.2	24.3	---	---	2	
2.	17.0	---	.1	17.0	---	---	1	
3.	17.0	---	.1	14.6	---	---	2	
4.	17.0	---	.1	16.3	---	---	1	
5.	17.0	---	.3	23.5	---	---	2	
6.	17.0	---	.2	17.0	---	---	3	
7.	17.0	---	.2	16.8	---	---	1	
8.	17.0	---	.2	21.1	---	---	1	
9.	17.0	---	.2	19.0	---	---	3	
10.	---	---	---	---	---	---	---	Dead
11.	17.0	---	.2	23.4	---	---	4	
12.	17.0	---	.1	13.2	---	---	1	
13.	17.0	---	.2	30.1	---	---	1	
14.	17.0	---	.2	16.4	---	---	1	
15.	17.0	---	.2	20.5	---	---	1	
16.	17.0	---	.3	21.7	---	---	1	
17.	17.0	---	.2	18.2	---	---	2	
18.	17.0	---	.2	15.1	---	---	1	
19.	17.0	---	.1	14.8	---	---	1	
20.	17.0	17.0	.3	26.4	33.0	9	3	

TABLE IV

Agropyron smithii Study Area Horse Creek Date 30 December 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	17.0	---	.2	24.3	---	---	2	
2.	17.0	---	.1	17.0	---	---	1	
3.	17.0	---	.1	14.6	---	---	2	
4.	17.0	---	.1	16.3	---	---	1	
5.	17.0	---	.3	23.5	---	---	2	
6.	17.0	---	.2	17.0	---	---	3	
7.	17.0	---	.2	16.8	---	---	1	
8.	17.0	---	.2	25.1	---	---	1	
9.	17.0	---	.2	19.0	---	---	3	
10.	---	---	---	---	---	---	---	Dead
11.	17.0	---	.2	23.4	---	---	4	
12.	17.0	---	.1	13.2	---	---	1	
13.	17.0	---	.2	30.1	---	---	1	
14.	17.0	---	.2	16.4	---	---	1	
15.	17.0	---	.2	20.5	---	---	1	
16.	17.0	---	.3	21.7	---	---	1	
17.	17.0	---	.2	18.2	---	---	2	
18.	17.0	---	.2	15.1	---	---	1	
19.	17.0	---	.1	14.8	---	---	1	
20.	17.0	17.0	.3	26.4	---	---	3	Matured without shattering

TABLE IV

Agropyron spicatum Study Area Horse Creek Date 24 January 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.	NO NEW GROWTH											
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum Study Area Horse Creek Date 12 March 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.												
2.												
3.												
4.												
5.												60% grazed by elk
6.												
7.												
8.												
9.												
10.	NO NEW GROWTH											
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Agropyron spicatum **Study Area** Horse Creek **Date** 28 May 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	4.3	5.0	---	---	13.5	.4	24.9	---	---	---	---	
2.	4.1	---	---	---	9.0	.3	18.5	---	---	---	---	
3.	4.2	---	---	---	9.0	.4	31.0	---	---	---	---	
4.	3.7	---	---	---	3.5	.2	13.4	---	---	---	---	
5.	4.1	---	---	---	1.5	.2	17.6	---	---	---	---	
6.	4.3	5.1	---	---	13.5	.3	28.3	---	---	---	---	Old - decadent
7.	4.2	---	---	---	7.5	.3	28.7	---	---	---	---	Sparse
8.	4.3	---	---	---	17.5	.4	29.0	---	---	---	---	Intermediate
9.	4.3	---	---	---	11.5	.4	24.5	---	---	---	---	
10.	4.1	---	---	---	14.0	.4	26.8	---	---	---	---	
11.	4.0	---	---	---	3.0	.3	16.6	---	---	---	---	Sparse
12.	3.8	---	---	---	.5	.2	13.1	---	---	---	---	
13.	4.1	---	---	---	8.5	.3	25.1	---	---	---	---	
14.	4.1	---	---	---	18.0	.3	28.5	---	---	---	---	Sparse
15.	4.0	---	---	---	7.0	.2	15.1	---	---	---	---	
16.	4.1	---	---	---	9.5	.3	16.9	---	---	---	---	
17.	4.1	---	---	---	1.0	.2	15.3	---	---	---	---	
18.	3.8	---	---	---	6.5	.3	30.1	---	---	---	---	
19.	4.1	---	---	---	4.0	.2	15.6	---	---	---	---	
20.	4.1	---	---	---	5.0	.3	26.2	---	---	---	---	

TABLE IV

Agropyron spicatum   **Study Area** Horse Creek   **Date** 9 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	4.5	6.4	---	---	13.5	.4	36.0	37.5	9.0	32.0	---	
2.	4.4	6.2	---	---	9.0	.4	28.7	27.3	2.0	7.0	---	
3.	4.5	6.2	---	---	9.0	.5	36.6	32.0	4.0	1.0	---	
4.	4.3	5.3	---	---	3.5	.3	14.9	---	---	---	---	
5.	4.4	5.3	---	---	1.5	.4	38.5	---	---	---	---	
6.	4.4	5.2	---	---	13.5	.4	25.5	---	---	---	---	
7.	4.3	5.3	---	---	7.5	.3	28.1	---	---	---	---	
8.	4.5	6.5	---	---	17.5	.4	36.5	37.0	6.0	51.0	---	
9.	4.5	6.4	---	---	11.5	.4	40.3	42.0	5.0	7.0	---	
10.	4.5	6.4	---	---	14.0	.4	38.7	33.0	4.0	4.0	---	
11.	4.1	---	---	---	3.0	.3	17.2	---	---	---	---	
12.	4.2	---	---	---	.5	.3	19.5	---	---	---	---	
13.	4.3	5.2	---	---	8.5	.3	26.0	---	---	---	---	
14.	4.4	5.1	---	---	18.0	.4	27.8	---	---	---	---	
15.	4.3	---	---	---	7.0	.3	13.0	---	---	---	---	
16.	4.3	---	---	---	9.5	.3	18.7	---	---	---	---	
17.	4.3	---	---	---	1.0	.3	16.1	---	---	---	---	
18.	4.3	---	---	---	6.5	.3	27.3	---	---	---	---	
19.	4.2	---	---	---	4.0	.3	17.4	---	---	---	---	
20.	4.3	---	---	---	5.0	.3	25.5	---	---	---	---	

TABLE IV

Agropyron spicatum **Study Area** Horse Creek **Date** 24 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	4.6	6.5	---	---	13.5	.3	37.2	56.7	7.0	56.0	---	
2.	4.6	6.5	---	---	9.0	.4	34.7	41.7	6.0	8.0	---	
3.	4.6	---	---	---	9.0	.5	31.5	---	---	---	---	
4.	4.5	5.1	---	---	3.5	.3	12.1	---	---	---	---	
5.	4.5	5.1	---	---	1.5	.3	17.0	---	---	---	---	
6.	4.7	6.5	---	---	13.5	.4	38.6	54.5	7.0	11.0	---	
7.	4.4	5.1	---	---	7.5	.3	28.7	---	---	---	---	
8.	4.4	---	---	---	17.5	.3	24.7	---	---	---	---	
9.	4.7	6.5	---	---	11.5	.4	51.6	70.4	7.0	14.0	---	
10.	4.5	6.4	---	---	14.0	.4	36.0	46.8	5.0	8.0	---	
11.	4.5	5.2	---	---	3.0	.3	17.8	---	---	---	---	
12.	4.5	6.3	---	---	.5	.3	26.6	31.5	4.0	1.0	---	
13.	4.5	5.3	---	---	8.5	.4	30.0	---	---	---	---	
14.	4.5	5.3	---	---	18.0	.4	27.8	---	---	---	---	
15.	4.5	5.1	---	---	7.0	.2	14.7	---	---	---	---	
16.	4.5	5.2	---	---	9.5	.3	20.2	---	---	---	---	
17.	4.5	5.1	---	---	1.0	.3	16.9	---	---	---	---	
18.	4.5	5.3	---	---	6.5	.3	28.1	---	---	---	---	
19.	4.5	5.1	---	---	4.0	.3	18.5	---	---	---	---	
20.	4.5	5.1	---	---	5.0	.4	24.6	---	---	---	---	

TABLE IV

Agropyron spicatum **Study Area** Horse Creek **Date** 15 July 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	14.2	10.5	---	---	13.5	.3	34.0	46.5	5.0	4.0	---	
2.	14.2	10.5	---	---	9.0	.3	32.6	47.0	6.0	9.0	---	
3.	14.2	10.6	---	---	9.0	.3	40.7	52.5	6.0	1.0	---	
4.	14.3	---	---	---	3.5	.2	14.4	---	---	---	---	
5.	14.2	10.5	---	---	1.5	.3	39.3	48.0	7.0	2.0	---	
6.	14.2	9.9	---	---	13.5	.3	39.0	57.4	7.0	11.0	---	
7.	14.2	---	---	---	7.5	.3	27.8	---	---	---	---	
8.	14.2	10.2	---	---	17.5	.3	25.7	53.0	6.0	62.0	---	
9.	14.2	10.3	---	---	11.5	.3	47.2	65.5	7.0	22.0	---	
10.	14.3	10.5	---	---	14.0	.3	35.0	48.5	6.0	11.0	---	
11.	14.2	10.5	---	---	3.0	.3	25.0	39.5	6.0	2.0	---	
12.	14.2	10.3	---	---	.5	.2	26.4	32.5	4.0	1.0	---	
13.	14.2	---	---	---	8.5	.2	26.7	---	---	---	---	
14.	14.2	5.2	---	---	18.0	.3	28.5	---	---	---	---	
15.	14.2	---	---	---	7.0	.2	17.3	---	---	---	---	
16.	14.2	5.2	---	---	9.5	.3	19.4	---	---	---	---	
17.	14.2	5.1	---	---	1.0	.2	17.5	---	---	---	---	
18.	14.2	---	---	---	6.5	.3	29.9	---	---	---	---	
19.	14.1	5.1	---	---	4.0	.2	28.1	---	---	---	---	
20.	14.1	5.2	---	---	5.0	.3	26.0	---	---	---	----	

TABLE IV

Agropyron spicatum **Study Area** Horse Creek **Date** 29 July 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	14.6	15.7	---	---	13.5	.2	40.3	61.5	9.0	38.0	---	
2.	14.7	15.4	---	---	9.0	.2	32.2	45.0	8.0	9.0	---	
3.	14.7	15.6	---	---	9.0	.2	34.5	53.0	7.0	1.0	---	
4.	14.7	---	---	---	3.5	.1	14.6	---	---	---	---	
5.	14.7	---	---	---	1.5	.2	19.0	---	---	---	---	
6.	14.7	15.7	---	---	13.5	.2	45.0	57.0	7.0	11.0	---	
7.	14.6	---	---	---	7.5	.2	28.0	---	---	---	---	
8.	14.7	15.7	---	---	17.5	.2	25.8	42.3	6.0	52.0	---	
9.	14.6	15.8	---	---	11.5	.2	51.5	70.2	8.0	13.0	---	
10.	14.7	15.8	---	---	14.0	.2	40.0	49.2	7.0	9.0	---	
11.	14.7	15.8	---	---	3.0	.2	24.2	42.4	7.0	2.0	---	
12.	14.7	---	---	---	.5	.2	19.5	---	---	---	---	
13.	14.7	---	---	---	8.5	.2	25.3	---	---	---	---	
14.	14.6	---	---	---	18.0	.3	28.2	---	---	---	---	
15.	14.6	---	---	---	7.0	.2	15.3	---	---	---	---	
16.	14.6	---	---	---	9.5	.2	19.2	---	---	---	---	
17.	14.7	---	---	---	1.0	.2	17.4	---	---	---	---	
18.	14.7	---	---	---	6.5	.2	29.3	---	---	---	---	
19.	14.7	---	---	---	4.0	.2	18.5	---	---	---	---	
20.	14.6	---	---	---	5.0	.2	25.9	---	---	---	---	

TABLE IV

Agropyron spicatum Study Area Horse Creek Date 20 September 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.	14.9	15.9	---	---	13.5	.2	40.3	61.5	9	38	---	
2.	14.9	15.9	---	---	9.0	.2	32.2	45.0	8	9	---	
3.	14.9	15.9	---	---	9.0	.2	34.5	53.0	7	1	---	
4.	14.9	---	---	---	3.5	.1	14.6	---	---	---	---	
5.	14.9	---	---	---	1.5	.2	19.0	---	---	---	---	
6.	14.9	15.9	---	---	13.5	.2	45.0	57.0	7	11	---	
7.	14.9	---	---	---	7.5	.2	28.0	---	---	---	---	
8.	14.9	15.9	---	---	17.5	.2	25.8	42.3	6	52	---	
9.	14.9	15.9	---	---	11.5	.2	51.5	70.2	8	13	---	
10.	14.9	15.9	---	---	14.0	.2	40.0	49.2	7	9	---	
11.	14.9	15.9	---	---	3.0	.2	24.2	42.2	7	2	---	
12.	14.9	---	---	---	.5	.2	19.5	---	---	---	---	
13.	14.9	---	---	---	8.5	.2	25.3	---	---	---	---	
14.	14.9	---	---	---	18.0	.2	28.2	---	---	---	---	
15.	14.9	---	---	---	7.0	.3	15.3	---	---	---	---	
16.	14.9	---	---	---	9.5	.2	19.2	---	---	---	---	
17.	14.9	---	---	---	1.0	.2	17.4	---	---	---	---	
18.	14.9	---	---	---	6.5	.2	29.3	---	---	---	---	
19.	14.9	---	---	---	4.0	.2	18.5	---	---	---	---	
20.	14.9	---	---	---	5.0	.2	25.9	---	---	---	---	

TABLE IV

Agropyron spicatum   **Study Area**   Horse Creek   **Date** 15 November 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.							
1.												
2.	17.0	17.0	---	---	13.5	.2	40.3	61.5	9.0	38.0	---	
3.	17.0	17.0	---	---	9.0	.2	32.2	45.0	8.0	9.0	---	
4.	17.0	17.0	---	---	9.0	.2	34.5	53.0	7.0	1.0	---	
5.	17.0	---	---	---	3.5	.1	14.6	---	---	---	---	
6.	17.0	---	---	---	1.5	.2	19.0	---	---	---	---	
7.	17.0	17.0	---	---	13.5	.2	45.0	57.0	7.0	11.0	---	
8.	17.0	17.0	---	---	17.5	.2	25.8	42.3	6.0	52.0	---	
9.	17.0	17.0	---	---	11.5	.2	51.5	70.2	8.0	13.0	---	
10.	17.0	17.0	---	---	14.0	.2	40.0	49.2	7.0	9.0	---	
11.	17.0	17.0	---	---	3.0	.2	24.2	42.4	7.0	2.0	---	
12.	17.0	---	---	---	.5	.2	19.5	---	---	---	---	
13.	17.0	---	---	---	8.5	.2	25.3	---	---	---	---	
14.	17.0	---	---	---	18.0	.3	28.2	---	---	---	---	
15.	17.0	---	---	---	7.0	.2	15.3	---	---	---	---	
16.	17.0	---	---	---	9.5	.2	19.2	---	---	---	---	
17.	17.0	---	---	---	1.0	.2	17.4	---	---	---	---	
18.	17.0	---	---	---	6.5	.2	29.3	---	---	---	---	
19.	17.0	---	---	---	4.0	.2	18.5	---	---	---	---	
20.	17.0	---	---	---	5.0	.2	25.9	---	---	---	---	

TABLE IV

Agropyron spicatum **Study Area** Horse Creek **Date** 30 December 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	17.0	17.0	---	---	13.5	.2	40.3	61.5	9.0	38.0	---	
2.	17.0	17.0	---	---	9.0	.2	32.2	45.0	8.0	9.0	---	
3.	17.0	17.0	---	---	9.0	.2	34.5	53.0	7.0	1.0	---	
4.	17.0	---	---	---	3.5	.1	14.6	---	---	---	---	
5.	17.0	---	---	---	1.5	.2	19.0	---	---	---	---	
6.	17.0	17.0	---	---	13.5	.2	45.0	57.0	7.0	11.0	---	
7.	17.0	---	---	---	7.5	.2	28.0	---	---	---	---	
8.	17.0	17.0	---	---	17.5	.2	25.8	42.3	6.0	52.0	---	
9.	17.0	17.0	---	---	11.5	.2	51.5	70.2	8.0	13.0	---	
10.	17.0	17.0	---	---	14.0	.2	40.0	49.2	7.0	9.0	---	
11.	17.0	17.0	---	---	3.0	.2	24.2	42.4	7.0	2.0	---	
12.	17.0	---	---	---	.5	.2	19.5	---	---	---	---	
13.	17.0	---	---	---	8.5	.2	25.3	---	---	---	---	
14.	17.0	---	---	---	18.0	.3	28.2	---	---	---	---	
15.	17.0	---	---	---	7.0	.2	15.3	---	---	---	---	
16.	17.0	---	---	---	9.5	.2	19.2	---	---	---	---	
17.	17.0	---	---	---	1.0	.2	17.4	---	---	---	---	
18.	17.0	---	---	---	6.5	.2	29.3	---	---	---	---	
19.	17.0	---	---	---	4.0	.2	18.5	---	---	---	---	
20.	17.0	---	---	---	5.0	.2	25.9	---	---	---	---	

TABLE IV

Artemisia nova

Study Area Horse Creek

Date 24 January 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.			NO								
7.											
8.				NEW							
9.											
10.					GROWTH						
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia nova Study Area Horse Creek Date 12 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.				NO							
9.											
10.					NEW						
11.											
12.						GROWTH					
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia nova   Study Area Horse Creek   Date 28 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.2	---	26.0	---	---	27.0	4	50	3.5	---	
2.	3.0	---	18.0	---	---	50.0	5	85	3.0	---	
3.	3.0	---	10.5	---	---	10.7	2	20	1.5	---	
4.	3.1	---	26.5	---	---	36.4	4	25	2.0	---	
5.	3.1	---	26.5	---	---	36.4	4	25	2.0	---	
6.	3.1	---	18.0	---	---	28.0	4	20	2.0	---	
7.	3.2	---	22.5	---	---	27.2	4	30	5.5	---	
8.	3.0	---	28.5	---	---	10.9	5	60	1.0	---	
9.	3.1	---	9.5	---	---	18.8	3	15	1.5	---	
10.	3.1	---	21.0	---	---	32.0	5	75	1.5	---	
11.	3.1	---	14.0	---	---	27.9	5	80	2.5	---	
12.	3.1	---	51.0	---	---	78.3	4	25	2.0	---	
13.	3.1	---	17.0	---	---	37.0	4	35	2.0	---	
14.	3.1	---	18.0	---	---	7.6	5	85	2.3	---	
15.	3.2	---	6.0	---	---	22.8	2	0	3.5	---	
16.	3.2	---	26.0	---	---	36.0	4	15	3.5	---	
17.	3.2	---	15.5	---	---	---	5	90	3.0	---	
18.	3.1	---	18.0	---	---	22.5	4	20	2.0	---	
19.	3.1	---	24.0	---	---	36.5	4	15	2.5	---	
20.	3.1	---	7.0	---	---	4.3	2	0	1.5	---	

TABLE IV

Artemisia nova

Study Area Horse Creek

Date 9 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.5	---	32.0	---	---	27.0	4	40	8.0	---
2.	3.1	---	18.0	---	---	50.0	5	85	1.5	---
3.	3.4	---	11.0	---	---	10.7	2	20	4.0	---
4.	3.5	---	27.0	---	---	36.4	4	25	7.0	---
5.	3.4	---	19.0	---	---	28.0	4	20	4.5	---
6.	3.7	---	25.0	---	---	27.2	4	30	11.0	---
7.	3.6	---	43.5	---	---	10.9	5	60	7.5	---
8.	3.3	---	11.5	---	---	18.8	3	15	4.0	---
9.	3.3	---	22.5	---	---	32.0	5	75	4.0	---
10.	3.5	---	13.5	---	---	27.9	5	80	5.0	---
11.	3.7	---	53.0	---	---	78.3	4	25	8.0	---
12.	3.2	---	18.5	---	---	37.0	4	35	3.0	---
13.	3.5	---	43.0	---	---	7.6	5	85	6.5	---
14.	3.5	---	8.0	---	---	22.8	2	0	5.5	---
15.	3.3	---	24.0	---	---	35.3	5	80	4.5	---
16.	3.7	---	29.0	---	---	36.0	4	15	8.5	---
17.	3.4	---	17.0	---	---	---	5	90	4.5	---
18.	3.6	---	25.0	---	---	22.5	4	20	7.5	---
19.	3.6	---	26.0	---	---	36.5	4	15	7.5	---
20.	3.3	---	7.5	---	---	4.3	2	0	3.5	---

TABLE IV

Artemisia nova Study Area Horse Creek Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.5	5.2	37.0	---	---	27.0	4	40	2.5	11.5	
2.	3.5	---	15.0	---	---	50.0	5	85	1.5	---	Dying
3.	3.5	5.2	16.0	---	---	10.7	2	20	2.0	7.5	
4.	3.5	5.2	35.5	---	---	36.4	4	25	2.5	10.5	
5.	3.5	5.2	22.5	---	---	28.0	4	20	2.5	9.5	
6.	3.5	5.2	29.5	---	---	27.2	4	30	4.0	15.0	
7.	3.5	5.2	49.5	---	---	10.9	5	60	3.0	13.5	
8.	3.4	5.1	15.0	---	---	18.8	3	15	2.5	7.5	
9.	3.4	5.1	27.5	---	---	32.0	5	75	2.5	6.5	
10.	3.4	5.1	20.0	---	---	27.9	5	80	2.5	11.5	
11.	3.5	5.2	60.0	---	---	78.3	4	25	3.5	12.0	
12.	3.4	5.1	22.5	---	---	37.0	4	35	3.0	7.0	
13.	3.5	5.2	49.0	---	---	7.6	5	85	3.5	11.5	
14.	3.4	5.1	11.5	---	---	22.8	2	0	3.5	9.0	
15.	3.4	5.2	27.5	---	---	35.3	5	80	4.0	9.0	
16.	3.5	5.2	35.0	---	---	36.0	4	15	3.5	14.5	
17.	3.4	5.1	18.0	---	---	---	5	90	3.5	8.0	
18.	3.5	5.2	29.5	---	---	22.5	4	20	5.5	14.0	
19.	3.5	5.2	33.0	---	---	36.5	4	15	3.0	13.0	
20.	3.4	---	8.5	---	---	4.3	2	0	4.0	---	

TABLE IV

Artemisia nova Study Area Horse Creek Date 15 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.7	5.6	46.0	---	---	27.0	4	40	4.0	17.0
2.	---	---	---	---	---	---	---	99	---	---
3.	3.7	5.5	21.0	---	---	10.7	2	20	1.0	13.5
4.	3.7	5.6	40.5	---	---	36.4	4	25	2.5	13.5
5.	3.7	5.6	30.0	---	---	28.0	4	20	2.0	12.5
6.	3.8	5.6	35.0	---	---	27.2	4	30	3.5	22.0
7.	3.7	5.5	56.5	---	---	10.9	5	60	3.0	17.0
8.	3.6	5.6	19.0	---	---	18.8	3	15	2.0	13.5
9.	3.7	5.6	30.5	---	---	32.0	5	75	2.5	13.5
10.	3.8	5.6	26.0	---	---	27.9	5	80	3.0	16.5
11.	3.8	5.6	66.0	---	---	78.3	4	25	3.5	19.5
12.	3.7	5.6	28.5	---	---	37.0	4	35	2.5	13.0
13.	3.7	5.6	58.5	---	---	7.6	5	85	2.0	17.0
14.	3.6	---	10.5	---	---	22.8	2	0	9.0	---
15.	3.6	5.5	33.0	---	---	35.3	5	80	3.0	13.9
16.	3.7	5.6	43.0	---	---	36.0	4	15	2.5	20.5
17.	3.6	5.5	19.5	---	---	---	5	90	3.0	11.0
18.	3.7	5.6	32.5	---	---	22.5	4	20	3.5	15.5
19.	3.7	5.6	37.5	---	---	36.5	4	15	3.0	15.5
20.	3.6	---	9.0	---	---	4.3	---	0	5.0	---

TABLE IV

Artemisia nova Study Area Horse Creek Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	4.0	5.7	46.7	---	---	27.0	4	40	3.5	18.0	
2.	---	---	---	---	---	---	---	100	---	---	Dead
3.	4.2	5.7	22.0	---	---	10.7	2	20	1.5	14.0	
4.	4.1	5.7	39.5	---	---	36.4	4	25	2.0	15.0	
5.	4.2	5.7	28.0	---	---	28.0	4	20	1.5	14.5	
6.	4.2	5.7	34.5	---	---	27.2	4	30	2.0	20.0	
7.	4.2	5.7	54.0	---	---	10.9	5	60	3.5	21.5	
8.	4.2	5.7	20.0	---	---	18.8	3	15	4.0	16.0	
9.	4.2	5.6	25.0	---	---	32.0	5	75	2.0	14.5	
10.	4.2	5.7	25.5	---	---	27.9	5	80	3.5	16.0	
11.	4.3	5.7	66.0	---	---	78.3	4	25	3.5	22.0	
12.	4.3	5.7	30.0	---	---	37.0	4	35	2.0	16.0	
13.	4.1	5.7	56.0	---	---	7.6	5	85	3.0	15.5	
14.	4.1	---	11.0	---	---	22.8	2	0	10.0	---	
15.	4.1	5.6	32.0	---	---	35.3	5	80	3.5	14.5	
16.	4.2	5.7	39.5	---	---	36.0	4	15	4.5	21.0	
17.	4.2	5.6	21.0	---	---	---	5	90	5.0	11.0	
18.	4.1	5.7	33.5	---	---	22.5	4	20	4.0	19.0	
19.	4.2	5.7	38.5	---	---	36.5	4	15	3.5	17.0	
20.	4.1	---	8.5	---	---	4.3	2	0	5.0	---	

TABLE IV

Artemisia nova Study Area Horse Creek Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
1.	4.4	8.2	46.7	---	---	27.0	4	40	3.5	18.0	
2.	---	---	---	---	---	---	---	100	---	---	Dead
3.	4.6	8.2	22.0	---	---	10.7	2	20	1.5	19.0	
4.	4.5	8.2	39.5	---	---	36.4	4	25	2.0	15.0	
5.	4.6	8.2	28.0	---	---	28.0	4	20	1.5	14.5	
6.	4.6	8.2	34.5	---	---	27.2	4	30	2.0	20.0	
7.	4.6	8.2	54.0	---	---	10.9	5	60	3.5	21.5	
8.	4.6	8.2	20.0	---	---	18.8	3	15	4.0	16.0	
9.	4.6	8.1	25.0	---	---	32.0	5	75	2.0	14.5	
10.	4.6	8.2	25.5	---	---	27.9	5	80	3.5	16.0	
11.	4.7	8.2	66.0	---	---	78.3	4	25	3.5	22.0	
12.	4.7	8.2	30.0	---	---	37.0	4	35	2.0	16.0	
13.	4.5	8.2	56.0	---	---	7.6	5	85	3.0	15.5	
14.	4.5	---	11.0	---	---	22.8	2	0	10.0	---	
15.	4.6	8.1	32.0	---	---	35.3	5	80	3.5	14.5	
16.	4.6	8.2	39.5	---	---	36.0	4	15	4.5	21.0	
17.	4.6	8.1	21.0	---	---	---	5	90	5.0	11.0	
18.	4.5	8.2	33.5	---	---	22.5	4	20	4.0	19.0	
19.	4.6	8.2	58.5	---	---	36.5	4	15	3.5	17.0	
20.	4.5	---	8.5	---	---	4.3	2	0	5.0	---	

TABLE IV

Artemisia nova Study Area Horse Creek Date 15 November 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.8	15.9	46.7	---	---	27.0	4	40	3.5	18.0
2.	---	---	---	---	---	---	---	100	---	---
3.	14.8	15.9	22.0	---	---	10.7	2	20	1.5	14.0
4.	14.8	15.9	39.5	---	---	36.4	4	25	2.0	15.0
5.	14.8	15.9	28.0	---	---	28.0	4	20	1.5	14.5
6.	14.8	15.9	34.5	---	---	27.2	4	30	2.0	20.0
7.	14.8	15.9	54.0	---	---	10.9	5	60	3.5	21.5
8.	14.8	15.9	20.0	---	---	18.8	3	15	4.0	16.0
9.	14.8	15.9	25.0	---	---	32.0	5	75	2.0	14.5
10.	14.8	15.9	25.5	---	---	27.9	5	80	3.5	16.0
11.	14.8	15.9	66.0	---	---	78.3	4	25	3.5	22.0
12.	14.8	15.9	30.0	---	---	37.0	4	35	2.0	16.0
13.	14.8	15.9	56.0	---	---	7.6	5	85	3.0	15.5
14.	14.8	---	11.0	---	---	22.8	2	0	10.0	---
15.	14.8	15.9	32.0	---	---	35.3	5	80	3.5	14.5
16.	14.8	15.9	39.5	---	---	36.0	4	15	4.5	21.0
17.	14.8	15.9	21.0	---	---	---	5	90	5.0	11.0
18.	14.8	15.9	33.5	---	---	22.5	4	20	4.0	19.0
19.	14.8	15.9	58.5	---	---	36.5	4	15	3.5	17.0
20.	14.8	---	8.5	---	---	4.3	2	0	5.0	---

TABLE IV

Artemisia nova Study Area Horse Creek Date 30 December 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	14.8	15.9	46.7	---	---	27.0	4	40	3.5	18.0
2.	---	---	---	---	---	---	---	100	---	---
3.	14.8	15.9	22.0	---	---	10.7	2	20	1.5	14.0
4.	14.8	15.9	39.5	---	---	36.4	4	25	2.0	15.0
5.	14.8	15.9	28.0	---	---	28.0	4	20	1.5	14.5
6.	14.8	15.9	34.5	---	---	27.2	4	30	2.0	20.0
7.	14.8	15.9	54.0	---	---	10.9	5	60	3.5	21.5
8.	14.8	15.9	20.0	---	---	18.8	3	15	4.0	16.0
9.	14.8	15.9	25.0	---	---	32.0	5	75	2.0	14.5
10.	14.8	15.9	25.5	---	---	27.9	5	80	3.5	16.0
11.	14.8	15.9	66.0	---	---	78.3	4	25	3.5	22.0
12.	14.8	15.9	30.0	---	---	37.0	4	35	2.0	16.0
13.	14.8	15.9	56.0	---	---	7.6	5	85	3.0	15.5
14.	14.8	---	11.0	---	---	22.8	2	0	10.0	---
15.	14.8	15.9	32.0	---	---	35.3	5	80	3.5	14.5
16.	14.8	15.9	39.5	---	---	36.0	4	15	4.5	21.0
17.	14.8	15.9	21.0	---	---	---	5	90	5.0	11.0
18.	14.8	15.9	33.5	---	---	22.5	4	20	4.0	19.0
19.	14.8	15.9	58.5	---	---	36.5	4	15	3.5	17.0
20.	14.8	---	8.5	---	---	4.3	2	0	5.0	---

TABLE IV

Artemisia tridentata Study Area Horse Creek Date 24 January 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.											
7.			NO								
8.											
9.				NEW							
10.											
11.					GRO	WTH					
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Horse Creek Date 12 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.											
7.			NO								
8.											
9.				NEW							
10.											
11.											
12.					GROWTH						
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata   Study Area Horse Creek   Date 28 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.1	---	35.5	---	---	54.0	5	90	3.5	---
2.	3.2	---	29.0	---	---	71.5	5	75	4.5	---
3.	3.0	---	17.0	---	---	15.6	5	95	2.5	---
4.	3.1	---	52.0	---	---	58.9	4	30	5.0	---
5.	3.1	---	8.3	---	---	10.0	2	5	4.0	---
6.	3.0	---	16.0	---	---	23.8	5	45	3.5	---
7.	3.1	---	48.0	---	---	45.0	4	40	4.7	---
8.	3.1	---	6.5	---	---	61.7	5	35	4.0	---
9.	3.1	---	27.0	---	---	64.9	4	45	3.5	---
10.	3.0	---	13.5	---	---	31.2	5	95	3.0	---
11.	3.2	---	19.0	---	---	33.8	4	35	5.5	---
12.	3.0	---	17.5	---	---	16.6	5	45	2.0	---
13.	3.3	---	21.0	---	---	10.2	3	10	9.5	---
14.	3.2	---	39.0	---	---	53.8	5	75	6.5	---
15.	3.1	---	16.0	---	---	13.5	3	1	3.0	---
16.	3.2	---	38.0	---	---	43.9	5	55	4.5	---
17.	3.2	---	21.5	---	---	52.0	4	20	7.0	---
18.	3.0	---	23.0	---	---	24.9	5	90	2.5	---
19.	3.2	---	12.5	---	---	9.9	5	80	6.0	---
20.	3.1	---	19.0	---	---	13.7	5	85	3.5	---

TABLE IV

Artemisia tridentata   Study Area Horse Creek   Date 9 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.5	---	36.0	---	---	54.0	5	3.5	8.0	---
2.	3.4	---	32.0	---	---	71.5	5	4.5	6.0	---
3.	3.3	---	20.5	---	---	15.6	5	2.5	4.0	---
4.	3.5	---	5.0	---	---	58.9	4	5.0	8.5	---
5.	3.5	---	10.0	---	---	10.0	2	4.0	9.5	---
6.	3.4	---	17.8	---	---	23.8	5	3.5	5.0	---
7.	3.6	---	53.0	---	---	45.0	4	4.7	11.0	---
8.	3.4	---	8.0	---	---	61.7	5	4.0	6.0	---
9.	3.4	---	29.0	---	---	64.9	4	3.5	5.5	---
10.	3.4	---	16.0	---	---	31.2	5	3.0	6.5	---
11.	3.5	---	26.0	---	---	33.8	4	5.5	7.5	---
12.	3.2	---	19.5	---	---	16.6	5	2.0	2.5	---
13.	3.7	---	21.5	---	---	10.2	3	9.5	15.5	---
14.	3.6	---	39.0	---	---	53.8	5	6.5	10.0	---
15.	3.4	---	19.5	---	---	13.5	3	3.0	6.0	---
16.	3.5	---	40.0	---	---	43.9	5	4.5	6.0	---
17.	3.7	---	54.5	---	---	52.0	4	7.0	14.0	---
18.	3.3	---	24.0	---	---	24.9	5	2.5	4.0	---
19.	3.5	---	13.0	---	---	9.9	5	6.0	8.5	---
20.	3.5	---	23.0	---	---	23.7	5	3.5	8.0	---

TABLE IV

Artemisia tridentata   Study Area Horse Creek   Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.5	5.1	38.0	---	---	54.0	5	90	5.5	13.0
2.	3.4	5.1	31.0	---	---	71.5	5	75	5.5	4.5
3.	3.4	5.1	22.5	---	---	15.6	5	95	3.0	5.5
4.	3.5	5.1	56.0	---	---	58.9	4	30	8.5	12.0
5.	3.4	5.0	11.0	---	---	10.0	2	5	4.5	8.0
6.	3.4	---	15.0	---	---	23.8	5	45	5.0	---
7.	3.5	5.1	57.5	---	---	45.0	4	40	6.0	13.5
8.	3.4	---	8.5	---	---	51.0	5	35	5.0	---
9.	3.4	5.0	28.5	---	---	69.9	4	45	5.5	6.5
10.	3.4	---	13.0	---	---	31.2	5	95	3.5	---
11.	3.4	5.0	21.0	---	---	33.8	4	35	6.0	8.0
12.	3.5	---	18.5	---	---	16.6	5	45	3.0	---
13.	3.4	5.1	25.5	---	---	10.2	3	10	9.0	20.0
14.	3.4	5.1	47.0	---	---	53.8	5	75	6.5	12.5
15.	3.4	5.0	22.0	---	---	13.5	3	1	6.5	8.0
16.	3.5	5.1	43.0	---	---	43.9	5	55	6.0	14.0
17.	3.5	5.1	59.0	---	---	52.0	4	20	6.5	21.0
18.	3.4	---	28.0	---	---	24.9	5	90	3.0	---
19.	3.4	---	13.0	---	---	9.9	5	80	9.0	---
20.	3.5	5.1	26.0	---	---	13.7	5	80	8.5	11.5

TABLE IV

Artemisia tridentata Study Area Horse Creek Date 15 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.7	5.4	32.5	---	---	54.0	5	90	5.5	8.5
2.	3.7	5.4	30.0	---	---	71.5	5	75	6.0	12.0
3.	3.7	5.4	23.5	---	---	15.6	5	95	5.0	9.0
4.	3.7	5.5	58.0	---	---	58.9	4	30	6.0	15.0
5.	3.7	---	11.0	---	---	10.0	2	5	7.5	---
6.	3.7	---	15.5	---	---	23.8	5	45	5.5	---
7.	3.7	5.5	55.5	---	---	45.0	4	40	6.0	15.5
8.	3.7	---	10.5	---	---	61.0	5	35	5.0	---
9.	3.7	5.5	30.0	---	---	64.9	4	45	5.5	7.5
10.	3.6	---	12.0	---	---	31.2	5	95	4.0	---
11.	3.7	---	21.5	---	---	33.8	4	35	8.0	---
12.	3.7	---	18.0	---	---	16.6	5	45	3.0	---
13.	3.7	5.5	34.0	---	---	10.2	3	10	8.0	24.0
14.	3.7	5.5	49.5	---	---	53.8	5	75	5.5	16.0
15.	3.6	---	24.5	---	---	13.5	3	1	10.0	---
16.	3.6	5.4	48.5	---	---	43.9	5	55	16.0	16.0
17.	3.7	5.5	63.0	---	---	52.0	4	20	14.5	16.5
18.	3.7	---	24.0	---	---	24.9	5	90	4.0	---
19.	3.7	---	13.0	---	---	9.9	5	80	9.0	---
20.	3.7	---	26.0	---	---	13.7	5	80	11.5	---

TABLE IV

Artemisia tridentata Study Area Horse Creek Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.0	5.6	35.0	---	---	54.0	5	90	6.0	15.5
2.	4.0	5.6	32.5	---	---	71.5	5	75	5.5	12.0
3.	4.0	5.7	23.5	---	---	15.6	5	95	3.0	8.5
4.	4.0	5.7	65.0	---	---	58.9	4	30	7.0	15.5
5.	4.0	---	10.5	---	---	10.0	2	5	8.0	---
6.	4.0	---	16.0	---	---	23.8	5	45	5.5	---
7.	4.0	5.7	59.0	---	---	45.0	4	40	7.5	15.5
8.	4.0	---	11.0	---	---	61.0	5	35	7.0	---
9.	4.0	5.6	32.5	---	---	64.9	4	45	4.0	7.5
10.	4.0	---	12.0	---	---	31.2	5	95	3.5	---
11.	4.0	5.6	34.0	---	---	33.8	4	35	6.5	15.0
12.	4.0	---	18.0	---	---	16.6	5	45	2.5	---
13.	4.0	5.7	36.0	---	---	10.2	3	10	15.0	24.5
14.	4.0	5.6	47.0	---	---	53.8	5	75	5.5	16.0
15.	4.0	---	24.0	---	---	13.5	3	1	9.0	---
16.	4.0	5.4	47.0	---	---	43.9	5	55	16.0	22.5
17.	4.0	5.6	64.0	---	---	52.0	4	20	15.0	16.5
18.	4.0	---	27.0	---	---	24.9	5	90	4.0	---
19.	4.0	---	12.5	---	---	9.9	5	80	8.5	---
20.	4.0	---	27.0	---	---	13.7	5	80	12.0	---

TABLE IV

Artemisia tridentat Study Area Horse Creek Date 20 Sept 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	4.5	8.0	35.0	---	---	54.0	5	90	6.0	15.5	
2.	4.5	8.0	32.5	---	---	71.5	5	75	5.5	12.0	
3.	4.5	8.1	23.5	---	---	15.6	5	95	3.0	8.5	
4.	4.5	8.1	65.0	---	---	58.9	4	30	7.0	15.5	
5.	4.5	---	10.5	---	---	10.0	2	5	8.0	---	
6.	4.5	---	16.0	---	---	23.8	5	45	5.5	---	
7.	4.5	8.1	59.0	---	---	45.0	4	40	7.5	15.5	
8.	4.5	---	11.0	---	---	61.0	5	35	7.0	---	
9.	4.5	8.0	32.5	---	---	64.9	4	45	4.0	7.5	
10.	4.5	---	12.0	---	---	31.2	5	95	3.5	---	
11.	4.5	8.0	34.0	---	---	33.8	4	35	6.5	15.0	
12.	4.5	---	18.0	---	---	16.6	5	45	2.5	---	
13.	4.5	8.1	36.0	---	---	10.2	3	10	15.0	24.5	
14.	4.5	8.0	47.0	---	---	53.8	5	75	5.5	16.0	
15.	4.5	---	24.0	---	---	13.5	3	1	9.0	---	
16.	4.5	7.8	47.0	---	---	43.9	5	55	16.0	22.5	
17.	4.5	8.0	64.0	---	---	52.0	4	20	15.0	16.5	
18.	4.5	---	27.0	---	---	24.9	5	90	4.0	---	
19.	4.5	---	12.5	---	---	9.9	5	80	8.5	---	
20.	4.5	---	27.0	---	---	13.7	5	80	12.0	---	

TABLE IV

Artemisia tridentata Study Area Horse Creek Date 15 November 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	14.8	15.9	35.0	---	---	54.0	5	90	6.0	15.5	
2.	14.8	15.9	32.5	---	---	71.5	5	75	5.5	12.0	
3.	14.8	15.9	23.5	---	---	15.6	5	95	3.0	8.5	
4.	14.8	15.9	65.0	---	---	58.9	4	30	7.0	15.5	Very little seed has been set
5.	14.8	---	10.5	---	---	10.0	2	5	8.0	---	
6.	14.8	---	16.0	---	---	23.8	5	45	5.5	---	
7.	14.8	15.9	59.0	---	---	45.0	4	40	7.5	15.5	
8.	14.8	---	11.0	---	---	61.0	5	35	7.0	---	
9.	14.8	15.9	32.5	---	---	64.9	4	45	4.0	7.5	
10.	14.8	---	12.0	---	---	31.2	5	95	3.5	---	
11.	14.8	15.9	34.0	---	---	33.8	4	35	6.5	15.0	
12.	14.8	---	18.0	---	---	16.6	5	45	2.5	---	
13.	14.8	15.9	36.0	---	---	10.2	3	10	15.0	24.5	
14.	14.8	15.9	47.0	---	---	53.8	5	75	5.5	16.0	
15.	14.8	---	24.0	---	---	13.5	3	1	9.0	---	
16.	14.8	15.9	47.0	---	---	43.9	5	55	16.0	22.5	
17.	14.8	15.9	64.0	---	---	52.0	4	20	15.0	16.5	
18.	14.8	---	27.0	---	---	24.9	5	90	4.0	---	
19.	14.8	---	12.5	---	---	9.9	5	80	8.5	---	
20.	14.8	---	27.0	---	---	13.7	5	80	12.0	---	

TABLE IV

Artemisia tridentata Study Area Horse Creek Date 30 December 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	14.8	15.9	35.0	---	---	54.0	5	90	6.0	15.5	
2.	14.8	15.9	32.5	---	---	71.5	5	75	5.5	12.0	
3.	14.8	15.9	23.5	---	---	15.6	5	95	3.0	8.5	
4.	14.8	15.9	65.0	---	---	58.9	4	30	7.0	15.5	
5.	14.8	---	10.5	---	---	10.0	2	5	8.0	---	
6.	14.8	---	16.0	---	---	23.8	5	45	5.5	---	
7.	14.8	15.9	59.0	---	---	45.0	4	40	7.5	15.5	
8.	14.8	---	11.0	---	---	61.0	5	35	7.0	---	
9.	14.8	15.9	32.5	---	---	64.9	4	45	4.0	7.5	
10.	14.8	---	12.0	---	---	31.2	5	95	3.5	---	
11.	14.8	15.9	34.0	---	---	33.8	4	35	6.5	15.0	
12.	14.8	---	18.0	---	---	16.6	5	45	2.5	---	
13.	14.8	15.9	36.0	---	---	10.2	3	10	15.0	24.5	
14.	14.8	15.9	47.0	---	---	53.8	5	75	5.5	16.0	
15.	14.8	---	24.0	---	---	13.5	3	1	9.0	---	
16.	14.8	15.9	47.0	---	---	43.9	5	55	16.0	22.5	
17.	14.8	15.9	64.0	---	---	52.0	4	20	15.0	16.5	
18.	14.8	---	27.0	---	---	24.9	5	90	4.0	---	
19.	14.8	---	12.5	---	---	9.9	5	80	8.5	---	
20.	14.8	---	27.0	---	---	13.7	5	80	12.0	---	

TABLE IV

Agropyron smithii Study Area Mesa Antelope Date 12 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	3.3	---	---	.1	14.5	---	---	
2.	3.4	---	---	.3	18.5	---	---	
3.	3.2	---	---	.2	14.8	---	---	
4.	3.5	---	---	.1	8.4	---	---	
5.	4.0	---	---	.2	15.0	---	---	
6.	2.9	---	---	.1	11.2	---	---	
7.	3.6	---	---	.3	22.9	---	---	
8.	3.8	---	---	.2	24.4	---	---	
9.	3.9	---	---	.2	22.5	---	---	
10.	3.5	---	---	.1	10.1	---	---	
11.	3.1	---	---	.2	15.9	---	---	
12.	3.6	---	---	.1	11.2	---	---	Eaten
13.	3.9	---	---	.2	17.0	---	---	
14.	3.6	---	---	.3	18.1	---	---	
15.	2.9	---	---	.1	20.5	---	---	
16.	3.8	---	---	.2	21.4	---	---	
17.	3.5	---	---	.3	20.1	---	---	
18.	3.0	---	---	.1	7.5	---	---	
19.	3.0	---	---	.1	17.0	---	---	
20.	3.7	---	---	.2	13.8	---	---	

TABLE IV

Agropyron smithii Study Area Mesa Antelope Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	3.8	---	.2	18.0	---	---	1
2.	4.3	---	.2	18.3	---	---	1
3.	3.9	---	.2	13.0	---	---	2
4.	3.9	---	.1	8.0	---	---	2
5.	4.3	---	.2	14.0	---	---	2
6.	3.7	---	.1	6.8	---	---	1
7.	4.1	---	.2	20.4	---	---	2
8.	4.2	---	.2	20.2	---	---	1
9.	4.2	---	.2	19.2	---	---	1
10.	4.0	---	.2	9.1	---	---	1
11.	3.8	---	.2	15.3	---	---	1
12.	3.9	---	.2	11.5	---	---	3
13.	4.2	---	.2	13.2	---	---	1
14.	4.1	---	.2	7.9	---	---	1
15.	3.9	---	.2	16.0	---	---	2
16.	4.2	---	.2	17.0	---	---	2
17.	4.1	---	.2	19.7	---	---	2
18.	3.9	---	.1	8.1	---	---	2
19.	3.5	---	.2	17.9	---	---	1
20.	4.4	---	.2	12.4	---	---	2

TABLE IV

Agropyron smithii Study Area Mesa Antelope Date 4 August 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.0	---	.2	18.0	---	---	1
2.	14.4	---	.2	18.3	---	---	1
3.	14.2	---	.2	13.0	---	---	2
4.	14.2	---	.1	8.0	---	---	2
5.	14.4	---	.2	14.0	---	---	2
6.	14.0	---	.1	6.8	---	---	1
7.	14.1	---	.2	20.4	---	---	2
8.	14.2	---	.2	20.2	---	---	1
9.	14.3	---	.2	19.2	---	---	1
10.	14.1	---	.2	9.1	---	---	1
11.	14.0	---	.2	15.3	---	---	1
12.	14.0	---	.2	11.5	---	---	3
13.	14.3	---	.2	13.2	---	---	1
14.	14.0	---	.2	7.9	---	---	1
15.	14.0	---	.2	16.0	---	---	2
16.	14.3	---	.2	17.0	---	---	2
17.	14.0	---	.2	19.7	---	---	2
18.	14.0	---	.1	8.1	---	---	2
19.	14.0	---	.2	17.9	---	---	1
20.	14.5	---	.2	12.4	---	---	2

TABLE IV

Agropyron smithii Study Area Mesa Antelope Date 17 October 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.9	---	.2	18.0	---	---	1
2.	14.9	---	.2	18.0	---	---	1
3.	14.9	---	.2	13.0	---	---	2
4.	14.9	---	.1	8.0	---	---	2
5.	14.9	---	.2	14.0	---	---	2
6.	14.9	---	.1	6.8	---	---	1
7.	14.9	---	.2	20.4	---	---	2
8.	14.9	---	.2	20.2	---	---	1
9.	14.9	---	.2	19.2	---	---	1
10.	14.9	---	.2	9.1	---	---	1
11.	14.9	---	.2	15.3	---	---	1
12.	14.9	---	.2	11.5	---	---	3
13.	14.9	---	.2	13.2	---	---	1
14.	14.9	---	.2	7.9	---	---	1
15.	14.9	---	.2	16.0	---	---	2
16.	14.9	---	.2	17.0	---	---	2
17.	14.9	---	.2	19.2	---	---	2
18.	14.9	---	.1	---	---	2	
19.	14.9	---	.2	17.9	---	---	1
20.	14.9	---	.2	12.4	---	---	2

TABLE IV

Artemisia tridentata Study Area Mesa Antelope Date 12 June 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	3.3	---	17.0	---	---	42	4	10	2.5	---
2.	3.3	---	22.0	---	---	39	4	30	3.5	---
3.	3.3	---	30.0	---	---	59.0	4	20	2.5	---
4.	3.3	---	14.0	---	---	20.0	5	50	2.0	---
5.	3.1	---	14.0	---	---	24.0	3	5	1.5	---
6.	3.3	---	22.0	---	---	31.0	4	1	2.5	---
7.	3.2	---	21.5	---	---	36.0	4	5	2.0	---
8.	3.2	---	25.5	---	---	13.0	3	25	2.0	---
9.	3.3	---	25.5	---	---	43.0	4	20	3.0	---
10.	3.2	---	18.0	---	---	22.0	3	10	1.5	---
11.	3.1	---	9.5	---	---	16.0	3	5	1.5	---
12.	3.3	---	21.5	---	---	41.0	4	30	3.0	---
13.	3.2	---	24.5	---	---	21.0	5	35	1.5	---
14.	3.2	---	27.0	---	---	49.0	5	35	2.0	---
15.	3.2	---	12.0	---	---	31.0	4	2	2.0	---
16.	3.2	---	17.5	---	---	29.0	4	15	2.0	---
17.	3.2	---	16.5	---	---	33.0	5	20	1.5	---
18.	3.2	---	16.0	---	---	24.0	4	10	2.0	---
19.	3.3	---	22.5	---	---	51.0	4	12	3.0	---
20.	3.3	---	14.0	---	---	18.0	3	10	4.0	---

TABLE IV

Artemisia tridentata Study Area Mesa Antelope Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.4	5.1	19.1	---	---	42	4	10	2.5	4.0
2.	3.4	5.1	24.0	---	---	39	4	30	3.0	6.0
3.	3.4	5.1	52.0	---	---	59.0	4	20	2.5	4.0
4.	3.4	---	13.0	---	---	20.0	5	50	3.0	---
5.	3.3	5.0	14.5	---	---	24.0	3	5	1.5	1.5
6.	3.4	5.1	24.0	---	---	31.0	4	1	3.0	5.0
7.	3.4	5.1	22.5	---	---	36.0	4	5	2.0	5.5
8.	3.4	5.1	26.5	---	---	13.0	3	25	2.5	5.5
9.	3.4	5.1	25.0	---	---	43.0	4	20	3.0	4.0
10.	3.3	5.0	20.0	---	---	22.0	3	10	1.5	4.5
11.	3.3	---	11.0	---	---	16.0	3	5	1.5	---
12.	3.4	5.1	27.0	---	---	41.0	4	30	3.5	5.0
13.	3.3	---	25.0	---	---	21.0	5	35	2.0	---
14.	3.4	5.0	28.5	---	---	49.0	5	35	2.5	4.0
15.	3.3	---	7.5	---	---	31.0	4	2	1.0	---
16.	3.4	---	18.5	---	---	29.0	4	15	2.5	---
17.	3.3	---	15.0	---	---	33.0	5	20	1.0	---
18.	3.4	5.0	16.0	---	---	24.0	4	10	2.5	3.5
19.	3.4	5.1	23.0	---	---	51.0	4	12	2.5	6.0
20.	3.4	5.1	16.5	---	---	18.0	3	10	25	7.0

TABLE IV

Artemisia tridentata

Study Area Mesa Antelope

Date 4 August 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.2	5.7	19.1	---	---	4.2	4	10	2.5	4.0
2.	4.2	5.7	24.0	---	---	39	4	30	3.0	6.0
3.	4.2	5.7	32.0	---	---	59.0	4	20	2.5	4.0
4.	4.2	---	13.0	---	---	20.0	5	50	3.0	---
5.	4.1	5.6	14.5	---	---	24.0	3	5	1.5	1.5
6.	4.2	5.7	24.0	---	---	31.0	4	1	3.0	5.0
7.	4.2	5.7	22.5	---	---	36.0	4	5	2.0	5.5
8.	4.2	5.7	26.5	---	---	13.0	3	25	2.5	5.5
9.	4.2	5.7	25.0	---	---	43.0	4	20	3.0	4.0
10.	4.1	5.6	20.0	---	---	22.0	3	10	1.5	4.5
11.	4.1	---	11.0	---	---	16.0	3	5	1.5	---
12.	4.2	5.7	27.0	---	---	41.0	4	30	3.5	5.0
13.	4.1	---	25.0	---	---	21.0	5	35	2.0	---
14.	4.2	5.6	28.5	---	---	49.0	5	35	2.5	4.0
15.	4.1	---	7.5	---	---	31.0	4	2	1.0	---
16.	4.2	---	18.5	---	---	29.0	4	15	2.5	---
17.	4.1	---	15.0	---	---	33.0	5	20	1.0	---
18.	4.2	5.6	16.0	---	---	24.0	4	10	2.5	3.5
19.	4.2	5.7	23.0	---	---	51.0	4	12	2.5	6.0
20.	4.2	5.7	16.0	---	---	18.0	3	10	2.5	7.0

TABLE IV

Artemisia tridentata Study Area Mesa Antelope Date 17 October 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.0	10.5	19.0	---	---	42	4	10	2.5	4.0
2.	14.0	10.5	24.0	---	---	39	4	30	3.0	6.0
3.	14.0	10.5	32.0	---	---	5.9	4	20	2.5	4.0
4.	14.0	---	13.0	---	---	20.0	5	50	3.0	---
5.	14.0	10.4	14.5	---	---	24.0	3	5	1.5	1.5
6.	14.0	10.5	24.0	---	---	31.0	4	1	3.0	5.0
7.	14.0	10.5	22.5	---	---	36	4	5	2.0	5.5
8.	14.1	10.5	26.5	---	---	13	3	25	2.5	5.5
9.	14.0	10.5	25.0	---	---	43.0	4.0	20	3.0	4.0
10.	14.1	10.4	20.0	---	---	22.0	3	10	1.5	4.5
11.	14.0	---	11.0	---	---	16.0	3	5	1.5	---
12.	14.0	10.5	27.0	---	---	41.0	4	30	3.5	5.0
13.	14.0	---	25.0	---	---	21.0	5	35	2.0	---
14.	14.1	10.4	28.5	---	---	49.0	5	35	2.5	4.0
15.	14.0	---	7.5	---	---	31.0	4	2	1.0	---
16.	14.0	---	18.5	---	---	29.0	4	15	2.5	---
17.	14.0	---	15.0	---	---	33.0	5	20	1.0	---
18.	14.1	10.4	16.0	---	---	24.0	4	10	2.5	3.5
19.	14.0	10.5	23.0	---	---	61.0	4	12	2.5	6.0
20.	14.0	10.5	16.5	---	---	18.0	3	10	2.5	7.0

TABLE IV

Agropyron smithii Study Area Owl Draw Date 6 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.2	---	.4	13.8	---	---	2
2.	3.2	---	.2	9.1	---	---	1
3.	3.8	---	.3	18.2	---	---	2
4.	4.1	---	.3	13.8	---	---	2
5.	4.1	---	.2	10.2	---	---	1
6.	4.1	---	.4	16.8	---	---	1
7.	4.1	---	.2	10.3	---	---	1
8.	3.8	---	.2	16.1	---	---	2
9.	3.7	---	.4	22.4	---	---	6
10.	4.2	---	.2	11.0	---	---	2
11.	3.4	---	.3	14.2	---	---	2
12.	3.7	---	.3	12.6	---	---	2
13.	3.1	---	.2	9.9	---	---	1
14.	2.9	---	.1	6.4	---	---	1
15.	3.7	---	.3	15.8	---	---	1
16.	3.7	---	.3	17.2	---	---	8
17.	4.2	---	.4	27.6	---	---	1
18.	3.5	---	.2	9.5	---	---	4
19.	3.8	---	.3	11.7	---	- --	1
20.	3.6	---	.3	11.5	---	---	2

TABLE IV

Agropyron smithii Study Area Owl Draw Date 14 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.1	---	.4	18.5	---	---	2
2.	14.0	---	.2	13.8	---	---	1
3.	14.0	---	.3	20.8	---	---	2
4.	14.1	---	.3	16.7	---	---	2
5.	14.1	---	.2	22.2	---	---	1
6.	14.1	---	.4	24.1	---	---	1
7.	14.1	---	.2	14.4	---	---	1
8.	14.0	---	.3	19.0	---	---	2
9.	14.0	---	.4	25.9	---	---	6
10.	14.2	---	.2	17.7	---	---	2
11.	14.0	---	.3	16.1	---	---	2
12.	14.0	---	.3	13.5	---	---	2
13.	14.0	---	.2	12.6	---	---	1
14.	14.0	---	.1	17.9	---	---	1
15.	14.1	---	.3	19.5	---	---	1
16.	14.1	---	.3	12.9	---	---	8
17.	14.1	---	.4	28.3	---	---	1
18.	14.0	---	.2	11.5	---	---	4
19.	14.1	---	.3	26.1	---	---	1
20.	14.1	---	.3	22.0	---	---	2

TABLE IV

Agropyron smithii Study Area Owl Draw Date 28 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.4	---	.4	18.5	---	---	2
2.	14.3	---	.2	13.8	---	---	1
3.	14.3	---	.3	20.8	---	---	2
4.	14.4	---	.3	16.7	---	---	2
5.	14.8	---	.2	22.2	---	---	1
6.	14.4	---	.4	24.1	---	---	1
7.	14.4	---	.2	14.4	---	---	1
8.	14.3	---	.3	19.0	---	---	2
9.	14.3	---	.4	25.9	---	---	6
10.	19.5	---	.2	17.7	---	---	2
11.	14.3	---	.3	16.1	---	---	2
12.	14.3	---	.3	13.5	---	---	2
13.	14.3	---	.2	12.6	---	---	1
14.	14.3	---	.1	17.9	---	---	1
15.	14.4	---	.3	19.5	---	---	1
16.	14.4	---	.3	12.9	---	---	8
17.	14.4	---	.4	28.3	---	---	1
18.	14.3	---	.2	11.5	---	---	4
19.	14.4	---	.3	16.1	---	---	1
20.	14.4	---	.3	22.0	---	---	2

TABLE IV

Agropyron smithii Study Area Owl Draw Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.9	---	.4	18.6	---	---	2
2.	14.9	---	.2	13.8	---	---	1
3.	14.9	---	.3	20.8	---	---	2
4.	14.9	---	.3	16.7	---	---	2
5.	14.9	---	.2	22.2	---	---	1
6.	14.9	---	.4	24.1	---	---	1
7.	14.9	---	.2	14.4	---	---	1
8.	14.9	---	.3	19.0	---	---	2
9.	14.9	---	.4	25.9	---	---	6
10.	14.9	---	.2	17.7	---	---	2
11.	14.9	---	.3	16.1	---	---	2
12.	14.9	---	.3	13.5	---	---	2
13.	14.9	---	.2	12.6	---	---	1
14.	14.9	---	.1	17.9	---	---	1
15.	14.9	---	.3	19.5	---	---	1
16.	14.9	---	.3	12.9	---	---	8
17.	14.9	---	.4	28.3	---	---	1
18.	14.9	---	.2	11.5	---	---	4
19.	14.9	---	.3	16.1	---	---	1
20.	14.9	---	.3	22.0	---	---	2

TABLE IV

Agropyron spicatum　　Study Area　Owl Draw　　Date　6 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	4.2	---	---	---	9.0	.3	17.1	---	---	---	---	
2.	4.1	---	---	---	4.0	.3	14.0	---	---	---	---	
3.	3.9	---	---	---	.5	.3	17.4	---	---	---	---	
4.	3.8	---	---	---	3.0	.2	9.0	---	---	---	---	
5.	4.1	---	---	---	6.0	.3	16.3	---	---	---	---	
6.	3.8	---	---	---	.5	.2	10.5	---	---	---	---	
7.	4.2	---	---	---	2.0	.3	20.3	---	---	---	---	
8.	4.1	---	---	---	.5	.3	15.8	---	---	---	---	
9.	4.2	---	---	---	3.0	.4	21.1	---	---	---	---	
10.	4.2	---	---	---	21.0	.4	25.6	---	---	---	---	
11.	4.2	---	---	---	15.0	.3	19.9	---	---	---	---	
12.	4.1	---	---	---	13.0	.3	18.7	---	---	---	---	
13.	4.2	---	---	---	6.0	.3	15.7	---	---	---	---	
14.	4.2	---	---	---	10.0	.3	18.7	---	---	---	---	
15.	4.0	---	---	---	1.5	.2	10.5	---	---	---	---	
16.	4.2	---	---	---	16.0	.3	16.6	---	---	---	---	
17.	3.8	---	---	---	1.0	.2	9.3	---	---	---	---	
18.	4.2	---	---	---	3.0	.3	11.5	---	---	---	---	
19.	3.8	---	---	---	2.5	.2	16.0	---	---	---	---	
20.	4.4	5.2	---	---	11.5	.3	16.5	---	---	---	---	

TABLE IV

Agropyron spicatum   Study Area Owl Draw   Date 14 July 1975

PLANT No.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	CLUMP LGTH. cm.	CLUMP WIDTH cm.	CLUMP DIAM. cm.	MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
1.	14.2	9.0	---	---	9.0	.3	17.1	35.5	5	5	---	
2.	14.1	8.9	---	---	4.0	.3	14.0	13.5	1	1	---	
3.	4.9	---	---	---	.5	.3	17.4	---	---	---	---	
4.	4.8	---	---	---	3.0	.2	9.0	---	---	---	---	
5.	14.1	8.9	---	---	6.0	.3	16.3	29.5	5	3	---	
6.	4.8	---	---	---	.5	.2	10.5	---	---	---	---	
7.	14.2	9.0	---	---	2.0	.3	20.3	26.3	4	2	---	
8.	14.1	8.9	---	---	.5	.3	15.8	18.4	4	1	---	
9.	14.2	---	---	---	3.0	.4	21.1	---	---	---	---	
10.	14.2	9.0	---	---	21.0	.4	25.6	48.6	7	68	---	
11.	14.2	9.0	---	---	15.0	.3	19.9	41.1	6	22	---	
12.	14.1	8.9	---	---	13.0	.3	18.7	35.4	6	37	---	
13.	14.2	9.0	---	---	6.0	.3	15.7	31.9	4	1	---	
14.	14.2	9.0	---	---	10.0	.3	18.7	37.8	5	17	---	
15.	14.0	8.8	---	---	1.5	.2	10.5	13.7	5	1	---	
16.	14.2	9.0	---	---	16.0	.3	16.6	35.6	6	8	---	
17.	4.8	---	---	---	1.0	.2	9.3	---	---	---	---	
18.	14.2	9.0	---	---	3.0	.3	11.5	20.5	2	1	---	
19.	4.8	8.6	---	---	2.5	.2	16.0	20.2	4	1	---	
20.	14.4	9.2	---	---	11.5	.3	16.5	25.0	5	1	---	

TABLE IV

Agropyron spicatum Study Area Owl Draw Date 28 July 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	14.5	15.0	---	---	9.0	.3	17.1	35.5	5	5	---	
2.	14.4	15.0	---	---	4.0	.3	14.0	13.5	1	1	---	
3.	14.2	---	---	---	.5	.3	17.4	---	---	---	---	
4.	14.1	---	---	---	3.0	.2	9.0	---	---	---	---	
5.	14.4	15.0	---	---	6.0	.3	16.3	29.5	5	3	---	
6.	14.1	---	---	---	.5	.2	10.5	---	---	---	---	
7.	14.5	15.1	---	---	2.0	.3	20.3	26.3	4	2	---	
8.	14.4	15.0	---	---	.5	.3	15.8	18.4	4	1	---	
9.	14.5	---	---	---	3.0	.4	21.1	---	---	---	---	
10.	14.5	15.0	---	---	21.0	.4	25.6	48.6	7	68	---	
11.	14.5	15.1	---	---	15.0	.3	19.9	41.1	6	22	---	
12.	14.4	15.0	---	---	13.0	.3	18.7	35.4	6	37	---	
13.	14.5	15.0	---	---	6.0	.3	15.7	31.9	4	1	---	
14.	14.5	15.1	---	---	10.0	.3	18.7	37.8	5	17	---	
15.	14.3	13.8	---	---	1.5	.2	10.5	13.7	5	1	---	
16.	14.5	15.0	---	---	16.0	.3	16.6	35.6	6	8	---	
17.	14.1	---	---	---	1.0	.2	9.3	---	---	---	---	
18.	14.5	15.0	---	---	3.0	.3	11.5	20.5	2	1	---	
19.	14.1	13.6	---	---	2.5	.2	16.0	20.2	4	1	---	
20.	14.7	15.2	---	---	11.5	.3	16.5	25.0	5	1	---	

TABLE IV

Agropyron spicatum Study Area Owl Draw Date 20 September 1975

PLANT No.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	CLUMP LGTH. cm.	CLUMP WIDTH cm.	CLUMP DIAM. cm.	MAX. LEAF WIDTH cm.	MAX. LEAF HGHT. cm.	MAX. SPIKE HGHT. cm.	NOS. SPIKELETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
1.	14.9	15.9	---	---	9.0	.3	17.1	35.5	5	5	---	
2.	14.9	15.9	---	---	4.0	.3	14.0	13.5	1	1	---	
3.	14.9	---	---	---	.5	.3	17.4	---	---	---	---	
4.	14.9	---	---	---	3.0	.2	9.0	---	---	---	---	
5.	14.9	15.9	---	---	6.0	.3	16.3	29.5	5	3	---	
6.	14.9	---	---	---	.5	.2	10.5	---	---	---	---	
7.	14.9	15.9	---	---	2.0	.3	20.3	26.3	4	2	---	
8.	14.9	15.9	---	---	.5	.3	15.8	18.4	4	1	---	
9.	14.9	---	---	---	3.0	.4	21.1	---	---	---	---	
10.	14.9	15.9	---	---	21.0	.4	25.6	48.6	7	68	---	
11.	14.9	15.9	---	---	15.0	.3	19.9	41.1	6	22	---	
12.	14.9	15.9	---	---	13.0	.3	18.7	35.4	6	37	---	
13.	14.9	15.9	---	---	6.0	.3	15.7	31.9	4	1	---	
14.	14.9	15.9	---	---	10.0	.3	18.7	37.8	5	17	---	
15.	14.9	15.9	---	---	1.5	.2	10.5	13.7	5	1	---	
16.	14.9	15.9	---	---	16.0	.3	16.6	35.6	6	8	---	
17.	14.9	---	---	---	1.0	.2	9.3	---	---	---	---	
18.	14.9	15.9	---	---	3.0	.3	11.5	20.5	2	1	---	
19.	14.9	15.9	---	---	2.5	.2	16.0	20.2	4	1	---	
20.	14.9	15.9	---	---	11.5	.3	16.5	25.0	5	1	---	

TABLE IV

Artemisia nova Study Area Owl Draw Date 6 June 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	3.4	---	6.5	---	---	5.8	2	0	3.0	---
2.	3.1	---	13.5	---	---	12.7	2	1	1.0	---
3.	3.2	---	11.5	---	---	11.5	2	5	1.0	---
4.	3.3	---	9.5	---	---	14.6	3	3	2.0	---
5.	3.3	---	9.5	---	---	10.4	2	0	2.5	---
6.	3.2	---	12.0	---	---	11.6	5	10	1.0	---
7.	3.3	---	13.5	---	---	15.6	3	0	2.0	---
8.	3.3	---	13.5	---	---	15.9	3	5	2.0	---
9.	3.1	---	10.0	---	---	24.5	2	5	1.0	---
10.	3.3	---	9.5	---	---	10.8	5	60	2.0	---
11.	3.2	---	10.0	---	---	11.1	5	50	1.5	---
12.	3.1	---	11.0	---	---	14.9	5	15	.1	---
13.	3.3	---	9.0	---	---	8.7	2	1	1.5	---
14.	3.2	---	12.0	---	---	21.8	5	40	2.0	---
15.	3.4	---	10.0	---	---	41.5	4	5	3.0	---
16.	3.2	---	7.0	---	---	17.0	5	55	1.5	---
17.	3.3	---	11.0	---	---	19.5	3	0	2.5	---
18.	3.2	---	16.0	---	---	33.7	4	25	1.5	---
19.	3.2	---	10.0	---	---	7.8	3	0	1.5	---
20.	3.2	---	4.0	---	---	5.9	2	0	1.5	---

TABLE IV

Artemisia nova Study Area Owl Draw Date 14 July 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	3.8	---	6.5	---	---	5.8	2	0	3.0	---
2.	3.5	---	13.5	---	---	12.7	2	1	1.5	---
3.	3.6	---	11.5	---	---	11.5	2	5	1.5	---
4.	3.7	---	9.5	---	---	14.6	3	3	2.0	---
5.	3.7	---	9.5	---	---	10.4	2	0	2.5	---
6.	3.6	---	12.0	---	---	11.6	5	10	1.5	---
7.	3.7	---	13.5	---	---	15.6	3	0	2.0	---
8.	3.7	5.6	13.5	---	---	15.9	3	5	2.0	4.0
9.	3.5	5.6	10.0	---	---	24.5	2	5	1.5	6.0
10.	3.7	5.6	9.5	---	---	10.8	5	60	2.0	3.0
11.	3.6	---	10.0	---	---	11.1	5	50	1.5	---
12.	3.5	---	11.0	---	---	14.9	5	15	1.0	---
13.	3.7	---	9.0	---	---	8.7	2	1	1.5	---
14.	3.6	---	12.0	---	---	21.8	5	40	2.0	---
15.	3.8	5.6	10.0	---	---	41.5	4	5	3.0	5.0
16.	3.6	5.6	7.0	---	---	17.0	5	55	2.0	3.0
17.	3.7	5.6	11.0	---	---	19.5	3	0	2.5	3.0
18.	3.6	---	16.0	---	---	33.7	4	25	2.5	---
19.	3.6	5.6	10.0	---	---	7.8	3	0	1.5	2.0
20.	3.6	---	4.0	---	---	5.9	2	0	1.5	---

TABLE IV

Artemisia nova

Study Area Owl Draw

Date 28 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.1	---	6.5	---	---	5.8	2	0	3.0	---
2.	3.8	---	13.5	---	---	12.7	2	1	1.5	---
3.	3.9	---	11.5	---	---	11.5	2	5	1.5	---
4.	4.0	---	9.5	---	---	14.6	3	3	2.0	---
5.	4.0	---	9.5	---	---	10.4	2	0	2.5	---
6.	3.9	---	12.0	---	---	11.6	5	10	1.5	---
7.	4.0	---	13.5	---	---	15.6	3	0	2.0	---
8.	4.0	5.8	13.5	---	---	15.9	3	5	2.0	4.0
9.	3.8	5.8	10.0	---	---	24.5	2	5	1.5	6.0
10.	4.0	5.8	9.5	---	---	10.8	5	60	2.0	3.0
11.	3.9	---	10.0	---	---	11.1	5	50	1.5	---
12.	3.8	---	11.5	---	---	14.9	5	15	1.0	---
13.	4.0	---	9.0	---	---	8.7	2	1	1.5	---
14.	3.9	---	12.0	---	---	21.8	5	40	2.0	---
15.	4.1	---	10.0	---	---	41.5	4	5	3.0	---
16.	3.9	5.8	7.0	---	---	17.0	5	55	2.0	5.0
17.	4.0	5.8	11.0	---	---	19.5	3	0	2.5	3.0
18.	3.9	5.8	16.0	---	---	33.7	4	25	2.5	3.0
19.	3.9	---	10.0	---	---	7.8	3	0	1.5	---
20.	3.9	5.8	4.0	---	---	5.9	2	0	1.5	2.0

TABLE IV

Artemisia nova   Study Area Owl Draw   Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	PHENO. STAGE SCORE REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	4.9	---	6.5	---	---	5.8	2	0	3.0	---
2.	4.6	---	13.5	---	---	12.7	2	1	1.5	---
3.	4.7	---	11.5	---	---	11.5	2	5	1.5	---
4.	4.8	---	9.5	---	---	14.6	3	3	2.0	---
5.	4.8	---	9.5	---	---	10.4	2	0	2.5	---
6.	4.7	---	12.0	---	---	11.6	5	10	1.5	---
7.	4.8	---	13.5	---	---	15.6	3	0	2.0	---
8.	4.8	8.2	13.5	---	---	15.9	3	5	2.0	4.0
9.	4.6	8.2	10.0	---	---	24.5	2	5	1.5	6.0
10.	4.8	8.2	9.5	---	---	10.8	5	60	2.0	3.0
11.	4.7	---	10.0	---	---	11.1	5	50	1.5	---
12.	4.6	---	11.0	---	---	14.9	5	15	1.0	---
13.	4.8	---	9.0	---	---	8.7	2	1	1.5	---
14.	4.7	---	12.0	---	---	21.8	5	40	2.0	---
15.	4.9	---	10.0	---	---	41.5	4	5	3.0	---
16.	4.7	8.1	7.0	---	---	17.0	5	55	2.0	5.0
17.	4.8	8.2	11.0	---	---	19.5	3	0	2.5	3.0
18.	4.7	8.2	16.0	---	---	33.7	4	25	2.5	3.0
19.	4.7	---	10.0	---	---	7.8	3	0	1.5	---
20.	4.7	8.1	4.0	---	---	5.9	2	0	1.5	2.0

TABLE IV

Artemisia tridentata Study Area Owl Draw Date 6 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.3	---	44.0	---	---	55.3	4	15	4.0	---
2.	3.2	---	45.5	---	---	46.7	5	20	3.0	---
3.	3.3	---	24.5	---	---	48.5	5	60	3.5	---
4.	3.2	---	14.5	---	---	12.0	3	50	3.5	---
5.	3.3	---	22.0	---	---	27.8	3	5	4.0	---
6.	3.3	---	29.5	---	---	52.4	4	10	4.0	---
7.	3.2	---	7.5	---	---	5.7	2	---	2.5	---
8.	3.2	---	20.5	---	---	24.0	3	5	2.5	---
9.	3.2	---	48.0	---	---	57.3	4	10	3.0	---
10.	3.2	---	9.0	---	---	7.9	2	---	2.5	---
11.	3.2	---	57.0	---	---	65.5	4	20	3.5	---
12.	3.4	---	55.0	---	---	59.7	4	10	6.0	---
13.	3.3	---	8.5	---	---	4.8	2	65	3.0	---
14.	3.2	---	45.5	---	---	68.0	4	15	4.0	---
15.	3.3	---	28.0	---	---	23.6	5	65	3.0	---
16.	3.3	---	9.0	---	---	7.9	2	---	3.0	---
17.	3.4	---	8.7	---	---	5.6	2	1	4.0	---
18.	3.2	---	21.0	---	---	12.2	3	40	3.0	---
19.	3.2	---	10.0	---	---	7.0	2	40	.3	---
20.	3.3	---	22.0	---	---	32.6	5	40	4.0	---

TABLE IV

Artemisia tridentata Study Area Owl Draw Date 14 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.7	5.5	51.5	---	---	55.3	4	15	6.5	13.0
2.	3.6	5.4	52.0	---	---	46.7	5	20	5.0	9.5
3.	3.7	5.5	27.6	---	---	48.5	5	60	10.5	11.5
4.	3.6	---	19.0	---	---	12.0	3	50	4.0	---
5.	3.7	---	25.6	---	---	27.8	3	5	7.0	---
6.	3.7	5.5	48.7	---	---	52.4	4	10	7.0	14.5
7.	3.6	---	7.5	---	---	5.7	2	---	3.0	---
8.	3.6	---	21.3	---	---	24.0	3	15	3.5	---
9.	3.6	5.4	56.7	---	---	57.3	4	10	3.5	12.5
10.	3.6	---	9.0	---	---	7.9	2	---	3.5	---
11.	3.6	---	57.0	---	---	65.5	4	20	6.0	---
12.	3.8	5.6	70.1	---	---	59.7	4	10	9.0	16.5
13.	3.7	---	8.5	---	---	4.8	2	65	4.0	---
14.	3.6	5.4	61.0	---	---	68.0	4	15	5.0	13.0
15.	3.7	---	36.1	---	---	23.6	5	65	3.0	---
16.	3.7	---	9.0	---	---	7.9	2	---	3.0	---
17.	3.8	---	8.7	---	---	5.6	2	1	4.0	---
18.	3.6	---	21.0	---	---	12.2	3	40	4.0	----
19.	3.6	---	10.0	---	---	7.0	2	40	2.0	---
20.	3.7	5.5	47.0	---	---	32.6	5	40	5.5	13.0

TABLE IV

Artemisia tridentata Study Area Owl Draw Date 28 July 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	4.0	5.6	44.0	---	---	55.3	4	15	6.5	13.0
2.	4.0	5.5	45.5	---	---	46.7	5	20	5.0	9.5
3.	4.0	5.6	29.0	---	---	48.5	5	60	10.5	11.5
4.	3.9	---	14.5	---	---	12.0	3	50	4.0	---
5.	4.0	---	22.0	---	---	27.8	3	5	7.0	---
6.	4.0	5.6	29.5	---	---	52.4	4	10	7.0	14.5
7.	3.9	---	7.5	---	---	5.7	2	---	3.0	---
8.	3.9	---	20.5	---	---	24.0	3	5	3.5	---
9.	3.8	5.5	48.0	---	---	57.3	4	10	3.5	12.5
10.	4.0	---	9.0	---	---	7.9	2	---	3.5	---
11.	4.0	---	57.0	---	---	65.5	4	20	6.0	---
12.	4.0	5.7	55.0	---	---	59.7	4	10	9.0	16.5
13.	4.0	---	8.5	---	---	4.8	2	65	4.0	---
14.	4.0	5.5	45.5	---	---	68.0	4	15	5.0	13.0
15.	4.0	---	28.0	---	---	23.6	5	65	3.0	---
16.	4.1	---	9.0	---	---	7.9	2	---	3.0	---
17.	4.1	---	8.7	---	---	5.6	2	1	4.0	---
18.	3.9	---	21.0	---	---	12.2	3	40	4.0	---
19.	3.9	---	10.0	---	---	7.0	2	40	2.0	---
20.	4.0	5.6	22.0	---	---	32.6	5	40	5.5	13.0

TABLE IV

Artemisia tridentata Study Area Owl Draw Date 20 September 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.8	8.0	44.0	---	---	55.3	4	15	6.5	13.0
2.	4.8	8.0	45.5	---	---	46.7	5	20	5.0	9.5
3.	4.8	8.0	24.0	---	---	48.5	5	60	10.5	11.5
4.	4.8	---	14.5	---	---	12.0	3	50	4.0	---
5.	4.8	---	22.0	---	---	27.8	3	5	7.0	---
6.	4.8	8.0	29.5	---	---	52.4	4	10	7.0	14.5
7.	4.8	---	7.5	---	---	5.7	2	---	3.0	---
8.	4.8	---	20.5	---	---	24.0	3	5	3.5	---
9.	4.7	8.0	48.0	---	---	57.3	4	10	3.5	12.5
10.	4.7	---	9.0	---	---	7.9	2	---	3.5	---
11.	4.7	---	57.0	---	---	65.5	4	20	6.0	---
12.	4.8	8.2	55.0	---	---	59.7	4	10	9.0	16.5
13.	4.8	---	8.5	---	---	4.8	2	65	4.0	---
14.	4.8	8.0	45.5	---	---	68.0	4	15	5.0	13.0
15.	4.7	---	28.0	---	---	23.6	5	65	3.0	---
16.	4.8	---	9.0	---	---	7.9	2	---	3.0	---
17.	4.7	---	8.7	---	---	5.6	2	1	4.0	---
18.	4.7	---	21.0	---	---	12.2	3	40	4.0	---
19.	4.7	---	10.0	---	---	7.0	2	40	2.0	---
20.	4.8	8.1	22.0	---	---	32.6	5	40	5.5	13.0

TABLE IV

Agropyron smithii Study Area Red Wash #2 Date 13 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	3.3	---	.1	18.0	---	---	1
2.	3.9	---	.2	26.0	---	---	1
3.	3.9	---	.1	12.8	---	---	3
4.	4.2	---	.1	15.6	---	---	1
5.	2.9	---	.1	3.3	---	---	2
6.	4.0	---	.2	19.6	---	---	1
7.	4.0	---	.2	24.6	---	---	2
8.	4.0	---	.3	22.8	---	---	10
9.	3.5	---	.2	22.0	---	---	5
10.	3.9	---	.2	15.1	---	---	1
11.	3.7	---	.1	17.5	---	---	1
12.	3.9	---	.2	18.1	---	---	1
13.	3.5	---	.1	10.6	---	---	1
14.	3.7	---	.2	14.5	---	---	4
15.	2.9	---	.1	8.3	---	---	2
16.	3.6	---	.1	8.0	---	---	3
17.	3.8	---	.2	15.4	---	---	1
18.	3.7	---	.2	12.4	---	---	1
19.	3.6	---	.1	9.0	---	---	2
20.	3.6	---	.2	14.4	---	---	4

TABLE IV

Agropyron smithii Study Area Red Wash #2 Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	3.8	---	.1	18.3	---	---	---	
2.	4.0	---	.2	29	---	---	---	
3.	3.8	---	.1	17.2	---	---	---	
4.	3.9	---	.1	16.1	---	---	---	
5.	3.9	---	.1	4.5	---	---	---	Dying
6.	3.9	---	.2	22	---	---	---	
7.	3.8	---	.2	25.5	---	---	---	
8.	4.2	---	.3	26.5	---	---	---	
9.	3.9	---	.2	21.8	---	---	---	
10.	4.2	---	.2	18	---	---	---	
11.	3.9	---	.2	31.5	---	---	---	
12.	3.9	---	.2	19.4	---	---	---	
13.	3.8	---	.2	12.7	---	---	---	
14.	4.1	---	.1	14.3	---	---	---	
15.	3.9	---	.1	9.9	---	---	---	
16.	4.2	---	.2	8.7	---	---	---	
17.	4.2	---	.2	20.3	---	---	---	
18.	4.1	---	.2	14.6	---	---	---	
19.	3.8	---	.1	9.6	---	---	---	
20.	4.2	---	.2	14.3	---	---	---	

TABLE IV

Agropyron smithii Study Area Red Wash #2 Date 31 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.8	---	.1	18.3	---	---	1
2.	14.0	---	.2	29.0	---	---	1
3.	4.8	---	.1	17.2	---	---	3
4.	4.9	---	.1	14.1	---	---	1
5.	4.9	---	.1	4.5	---	---	2
6.	4.9	---	.2	22.0	---	---	1
7.	4.8	---	.2	25.5	---	---	2
8.	14.2	---	.3	26.5	---	---	4
9.	4.9	---	.2	21.8	---	---	3
10.	14.2	---	.2	18.0	---	---	1
11.	4.9	---	.2	31.5	---	---	1
12.	4.9	---	.2	19.4	---	---	1
13.	4.8	---	.2	12.7	---	---	1
14.	14.1	---	.1	14.3	---	---	4
15.	4.9	---	.1	9.9	---	---	2
16.	14.2	---	.2	8.7	---	---	3
17.	14.2	---	.2	20.3	---	---	1
18.	14.1	---	.2	14.6	---	---	1
19.	4.8	---	.1	9.6	---	---	2
20.	14.2	---	.2	14.3	---	---	4

TABLE IV

Agropyron spicatum Study Area Red Wash #2 Date 13 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH. cm.	WIDTH cm.	DIAM. cm.	cm.	cm.	cm.				
1.	4.3	5.1	---	---	2.4	.2	24.8	---	---	---	---	
2. 4.3	4.3	5.0	---	---	1.0	.3	22.8	---	---	---	---	
3.	4.3	5.0	---	---	1.7	.3	24.0	---	---	---	---	
4.	4.3	5.1	---	---	1.9	.3	25.6	---	---	---	---	
5.	4.3	5.1	---	---	4.2	.4	28.1	---	---	---	---	
6.	4.3	---	---	---	2.	.3	13.4	---	---	---	---	
7.	4.2	---	---	---	5.	.3	21.0	---	---	---	---	
8.	4.3	5.1	---	---	6.	.3	29.0	---	---	---	---	
9.	4.3	5.0	---	---	3.2	.3	21.6	---	---	---	---	
10.	4.1	---	---	---	1.5	.2	15.1	---	---	---	---	
11.	4.2	---	---	---	6.	.3	20.7	---	---	---	---	
12.	4.3	5.0	---	---	1.7	.3	30.0	---	---	---	---	
13.	4.3	5.2	---	---	4.7	.4	28.2	---	---	---	---	
14.	4.2	---	---	---	7.6	.4	27.0	---	---	---	---	
15.	4.3	5.0	---	---	1.4	.3.	24.4	---	---	---	---	
16.	4.2	---	---	---	.5	.3	30.3	---	---	---	---	
17.	4.3	5.1	---	---	2.9	.4	25.3	---	---	---	---	
18.	4.2	---	---	---	1.1	.3	16.7	---	---	---	---	
19.	4.3	5.0	---	---	.7	.3	25.5	---	---	---	---	
20.	3.8	---	---	---	1.5	.2	25.3	---	---	---	---	

TABLE IV

Agropyron spicatum Study Area Red Wash #2 Date 26 June 1975

PLANT No.	PHENO. STAGE SCORE		CLUMP			MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPIKE-LETS/ CULM	NOS. REPR. CULMS	NOS. VEG. CULMS	MATURITY
	VEG.	REPR.	LGTH.	WIDTH	DIAM.							
			cm.	cm.	cm.	cm.	cm.	cm.				
1.	4.5	6.1	---	---	2.4	24.1	---	---	---	---	---	
2.	4.4	5.7	---	---	1.0	24.9	---	---	---	---	---	
3.	4.4	5.2	---	---	1.7	29.2	---	---	---	---	---	
4.	3.9	---	---	---	1.9	11.0	---	---	---	---	---	
5.	4.5	5.7	---	---	4.2	32.0	---	---	---	---	---	
6.	4.4	5.0	---	---	.2	22.0	---	---	---	---	---	
7.	4.4	5.2	---	---	.5	18.6	---	---	---	---	---	
8.	4.3	---	---	---	.6	17.3	---	---	---	---	---	
9.	4.4	5.2	---	---	3.2	22.2	---	---	---	---	---	
10.	4.1	---	---	---	1.5	14.5	---	---	---	---	---	
11.	4.4	5.2	---	---	.6	19.8	---	---	---	---	---	
12.	4.4	5.2	---	---	1.7	32.4	---	---	---	---	---	
13.	4.5	5.7	---	---	4.7	31.3	---	---	---	---	---	
14.	4.5	5.2	---	---	7.6	25.5	---	---	---	---	---	
15.	4.5	5.7	---	---	1.4	28.7	---	---	---	---	---	
16.	4.3	---	---	---	.5	18.0	---	---	---	---	---	
17.	4.5	6.2	---	---	2.9	28.2	27.2	.3	.5	---	---	
18.	4.4	5.2	---	---	1.1	22.5	---	---	---	---	---	
19.	4.3	5.2	---	---	.7	21.7	---	---	---	---	---	
20.	4.3	---	---	---	1.5	27.1	---	---	---	---	---	

Agropyron spicatum Study Area Red Wash #2 Date 31 July 1975

PLANT NO.	PHENO. STAGE SCORE		CLUMP			MAX LEAF WIDTH	MAX LEAF HGHT	MAX SPIKE HGHT	NOS SPIKELETS/ CULM	NOS REPR CULMS	NOS VEG CULMS	MATURITY
	VEG	REPR	LGTH cm	WIDTH cm	DIAM cm	cm	cm	cm				
1.												
2.												
3.												
4.												
5.			DATA									
6.												
7.				SHEET								
8.												
9.						MISSING						
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												

TABLE IV

Artemisia tridentata   Study Area Red Wash #2   Date 13 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.3	---	35.0	---	---	64	4	20	3.5	---
2.	3.2	---	43.0	54	48	51	4	60	.2	---
3.	3.3	---	41.5	---	---	118	4	5	3.5	---
4.	3.3	---	30.5	---	---	22	4	15	3.0	---
5.	3.3	---	23.5	---	---	34	5	40	3.5	---
6.	3.3	---	17.0	---	---	28	3	1	3.5	---
7.	3.3	---	37.0	82	66	74	4	5	3.0	---
8.	3.2	---	21.0	35	35	35	5	40	2.0	---
9.	3.2	---	27.0	31	22	27	4	10	2.0	---
10.	3.2	---	31.0	77	73	75	4	1	2.0	---
11.	3.1	---	5.0	---	---	4	5	75	1.0	---
12.	3.2	---	30.0	110	98	104	4	5	.3	---
13.	3.2	---	9.0	---	---	9	2	1	2.0	---
14.	3.3	---	30.0	---	---	74	4	1	3.5	---
15.	3.2	---	12.0	---	---	14	5	25	1.5	---
16.	3.2	---	27.0	---	---	46	4	15	2.0	---
17.	3.2	---	19.0	31	21	26	3	10	2.0	---
18.	3.3	---	41.0	---	---	110	4	5	3.0	---
19.	3.2	---	27.0	---	---	42	5	25	2.0	---
20.	3.2	---	37.5	---	---	46	4	25	2.0	---

TABLE IV

Artemisia tridentata Study Area Red Wash #2 Date 26 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.4	5.2	34.5	---	---	64	4	20	1.5	5.5	
2.	3.4	5.1	41.0	54	48	51	4	60	1.5	3.0	
3.	3.4	5.1	43.0	---	---	118	4	5	2.5	5.5	
4.	3.4	---	17.0	---	---	22	4	15	1.5	---	Dying
5.	3.4	5.2	28.5	---	---	34	5	40	3.0	6.5	
6.	3.4	5.2	17.0	---	---	28	3	1	3.5	6.0	
7.	3.4	5.1	39.0	82	66	74	4	5	2.5	5.0	
8.	3.4	5.0	25.0	35	35	35	5	40	2.0	2.5	
9.	3.4	5.0	25.0	31	22	27	4	10	2.5	3.0	
10.	3.4	5.1	32.0	77	73	75	4	1	2.0	3.5	
11.	3.3	---	6.5	---	---	4	5	75	1.0	---	
12.	3.4	5.1	29.0	110	98	104	4	5	2.5	5.0	
13.	3.4	---	9.0	---	---	9	2	1	1.5	---	
14.	3.4	5.1	27.5	---	---	74	4	1	2.5	5.5	
15.	3.4	---	13.0	---	---	14	5	25	2.0	---	
16.	3.4	5.1	36.0	---	---	46	4	15	2.0	5.0	
17.	3.4	5.1	19.0	31	21	26	3	10	2.0	4.0	
18.	3.4	5.1	41.5	---	---	110	4	5	2.5	4.5	
19.	3.4	5.0	26.5	---	---	42	5	25	1.5	4.0	
20.	3.4	5.2	38.5	---	---	46	4	25	2.5	4.0	

Artemisia tridentata Study Area Red Wash #2 Date 31 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm	PLANT LNGTH. cm	PLANT WIDTH cm	PLANT DIAM. cm	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm	NEW SEED STALK LNGTH cm	
	VEG.	REPR.									
1.											
2.											
3.											
4.			DATA								
5.											
6.				SH	EET						
7.											
8.						MISS	ING				
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 23 January 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.							
2.							
3.							
4.		NO					
5.							
6.			NEW				
7.							
8.				GROWTH			
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 27 February 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.							
2.							
3.							
4.							
5.							
6.		NO					
7.							
8.			NEW				
9.							
10.				GROWTH			
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 12 April 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	17.0	---	---	---	---	---	1	
2.	17.0	---	---	---	---	---	3	
3.	1.0	---	.1	3.4	---	---	1	
4.	1.0	---	.1	1.3	---	---	1	Eaten
5.	17.0	---	---	---	---	---	3	
6.	17.0	---	---	---	---	---	3	
7.	17.0	---	---	---	---	---	2	
8.	1.5	---	---	2.9	---	---	3	
9.	17.0	---	--	---	---	---	2	
10.	17.0	---	---	---	---	---	3	
11.	17.0	---	---	---	---	---	3	
12.	17.0	---	---	---	---	---	2	
13.	1.5	---	---	4.1	---	---	2	
14.	17.0	---	---	---	---	---	2	
15.	17.0	---	---	---	---	---	2	
16.	17.0	---	---	---	---	---	2	
17.	1.0	---	---	1.5	---	---	2	
18.	17.0	---	---	---	---	---	3	
19.	17.0	---	---	---	---	---	1	
20.	17.0	---	---	---	---	---	1	

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 5 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	3.7	---	.3	14.7	---	---	1
2.	3.7	---	.3	11.1	---	---	3
3.	4.2	---	.3	17.0	---	---	1
4.	4.1	---	.3	9.6	---	---	1
5.	4.4	---	.3	17.9	---	---	3
6.	4.5	5.1	.4	22.6	---	---	3
7.	4.5	5.0	.3	19.5	---	---	3
8.	4.3	---	.3	18.6	---	---	3
9.	3.8	---	.3	19.0	---	---	2
10.	4.1	---	.3	16.1	---	---	3
11.	3.7	---	.3	18.4	---	---	3
12.	4.0	---	.3	17.5	---	---	2
13.	4.3	---	.3	16.8	---	---	2
14.	2.9	---	.2	17.9	---	---	1
15.	3.7	---	.2	8.4	---	---	1
16.	3.6	---	.2	10.5	---	---	2
17.	2.9	---	.2	13.1	---	---	2
18.	2.8	---	.1	8.7	---	---	3
19.	3.4	---	.1	9.0	---	---	1
20.	3.5	---	.2	13.6	---	---	1

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.2	---	.3	17.7	---	---	1
2.	4.5	---	.3	17.5	---	---	3
3.	4.6	5.2	.3	21.0	---	---	1
4.	4.3	---	.3	13.7	---	---	1
5.	4.5	5.1	.4	21.3	---	---	3
6.	4.5	5.2	.4	26.1	---	---	3
7.	4.5	5.3	.4	22.6	---	---	2
8.	4.6	5.1	.4	20.5	---	---	3
9.	4.5	5.1	.4	20.8	---	---	2
10.	4.6	5.0	.4	16.5	---	---	3
11.	4.5	---	.4	22.1	---	---	3
12.	4.5	---	.3	11.2	---	---	2
13.	4.3	---	.3	18.4	---	---	2
14.	---	---	---	---	---	---	2
15.	4.0	---	.2	11.2	---	---	2
16.	4.3	---	.2	13.0	---	---	2
17.	3.9	---	.2	13.8	---	---	2
18.	3.9	---	.1	9.3	---	---	3
19.	3.9	---	.1	9.7	---	---	1
20.	2.9	---	.1	10.3	---	---	1

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 14 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.1	---	.4	18.3	---	---	1
2.	14.1	---	.3	13.1	---	---	3
3.	14.1	---	.3	20.8	---	---	1
4.	14.1	---	.4	13.6	---	---	1
5.	14.0	---	.4	23.4	---	---	3
6.	14.1	5.2	.4	25.5	---	---	3
7.	14.0	5.0	.5	24.4	---	---	2
8.	14.1	5.1	.4	19.6	---	---	3
9.	14.1	5.1	.3	22.3	---	---	2
10.	14.1	---	.4	16.5	---	---	3
11.	14.0	---	.4	21.4	---	---	3
12.	14.0	---	.4	17.8	---	---	2
13.	14.0	---	.4	18.9	---	---	2
14.	14.1	---	.2	18.0	---	---	2
15.	14.2	---	.2	11.1	---	---	2
16.	14.0	---	.2	13.6	---	---	2
17.	14.1	---	.2	13.7	---	---	2
18.	14.0	---	.1	9.8	---	---	3
19.	14.1	---	.1	10.0	---	---	1
20.	14.1	---	.1	10.2	---	---	1

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.3	---	.2	18.0	---	---	1	
2.	14.4	---	.2	13.1	---	---	3	
3.	14.3	---	.2	21,2	---	---	1	
4.	14.3	---	.3	23.1	---	---	1	
5.	---	---	---	---	---	---	---	Dead
6.	14.2	---	.3	27.4	---	---	3	
7.	14.3	5.3	.3	24.3	---	---	2	
8.	14.2	5.2	.3	20.7	---	---	3	
9.	14.2	5.3	.2	22.8	---	---	2	
10.	14.3	---	.2	16.4	---	---	3	
11.	14.2	---	.3	22.0	---	---	3	
12.	14.3	---	.2	11.6	---	---	2	
13.	14.2	---	.3	19.1	---	---	2	
14.	14.3	---	.1	18.0	---	---	2	
15.	14.5	---	.1	11.3	---	---	2	
16.	14.5	---	.1	6.5	---	---	2	
17.	14.4	---	.1	13.0	---	---	2	
18.	14.5	---	.1	9.9	---	---	3	
19.	14.7	---	.1	9.5	---	---	1	
20.	14.5	---	.1	9.7	---	---	1	

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 25 October 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	14.9	---	.2	18.0	---	---	1	
2.	14.9	---	.2	13.1	---	---	3	
3.	14.9	---	.2	21.2	---	---	1	
4.	14.9	---	.3	23.1	---	---	1	
5.	---	---	---	---	---	---	---	Dead
6.	14.9	---	.3	27.4	---	---	3	
7.	14.9	15.9	.3	24.3	28.7	5	2	
8.	14.9	15.9	.3	20.7	26.2	5	3	
9.	14.9	15.9	.2	22.8	29.3	5	2	
10.	14.9	---	.2	16.4	---	---	3	
11.	14.9	---	.3	22.0	---	---	3	
12.	14.9	---	.2	11.6	---	---	2	
13.	14.9	---	.3	19.1	---	---	2	
14.	14.9	---	.1	18.0	---	---	2	
15.	14.9	---	.1	11.3	---	---	2	
16.	14.9	---	.1	6.5	---	---	2	
17.	14.9	---	.1	13.0	---	---	2	
18.	14.9	---	.1	9.9	---	---	3	
19.	14.9	---	.1	9.5	---	---	1	
20.	14.9	---	.1	9.7	---	---	1	

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 15 November 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	17.0	---	.2	18.0	---	---	1	
2.	17.0	---	.2	13.1	---	---	3	
3.	17.0	---	.2	21.2	---	---	1	
4.	17.0	---	.3	23.1	---	---	1	
5.	---	---	---	---	---	---	---	Dead
6.	17.0	---	.3	27.4	---	---	3	
7.	17.0	17.0	.3	24.3	---	---	2	
8.	17.0	17.0	.3	20.7	---	---	3	
9.	17.0	17.0	.2	22.8	---	---	2	
10.	17.0	---	.2	16.4	---	---	3	
11.	17.0	---	.3	22.0	---	---	3	
12.	17.0	---	.2	11.6	---	---	2	
13.	17.0	---	.3	19.1	---	---	2	
14.	17.0	---	.1	18.0	---	---	2	
15.	17.0	---	.1	11.3	---	---	2	
16.	17.0	---	.1	6.5	---	---	2	
17.	17.0	---	.1	13.0	---	---	2	
18.	17.0	---	.1	9.9	---	---	3	
19.	17.0	---	.1	9.5	---	---	1	
20.	17.0	---	.1	9.7	---	---	1	

TABLE IV

Agropyron smithii Study Area Shoshoni Ant. #7 Date 30 December 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.	17.0	---	.2	18.0	---	---	1	
2.	17.0	---	.2	13.1	---	---	3	
3.	17.0	---	.2	21.2	---	---	1	
4.	17.0	---	.3	23.1	---	---	1	
5.	---	---	---	---	---	---	---	Dead
6.	17.0	---	.3	27.4	---	---	3	
7.	17.0	17.0	.3	24.3	---	---	2	
8.	17.0	17.0	.3	20.7	---	---	3	
9.	17.0	17.0	.2	22.8	---	---	2	
10.	17.0	---	.2	16.4	---	---	3	
11.	17.0	---	.3	22.0	---	---	3	
12.	17.0	---	.2	11.6	---	---	2	
13.	17.0	---	.3	19.1	---	---	2	
14.	17.0	---	.1	18.0	---	---	2	
15.	17.0	---	.1	11.3	---	---	2	
16.	17.0	---	.1	6.5	---	---	2	
17.	17.0	---	.1	13.0	---	---	2	
18.	17.0	---	.1	9.9	---	---	3	
19.	17.0	---	.1	9.5	---	---	1	
20.	17.0	---	.1	9.7	---	---	1	

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 23 January 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.										
2.										
3.										
4.										
5.										
6.			NO							
7.										
8.				NEW						
9.										
10.					GROWTH					
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 27 February 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.			NO								
7.											
8.				NEW							
9.											
10.					GRO	WTH					
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 12 April 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.			NO								
7.											
8.				NEW							
9.											
10.					GROWTH						
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 5 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.3	---	20.2	---	---	27.0	3	0	3.0	---
2.	3.4	---	18.5	---	---	44.3	5	20	5.0	---
3.	3.2	---	9.5	---	---	30.2	5	60	2.5	---
4.	3.3	---	16.0	---	---	24.8	4	5	3.0	---
5.	3.2	---	10.0	---	---	23.9	3	2	2.0	---
6.	3.3	---	27.0	---	---	41.0	4	5	3.5	---
7.	3.2	---	19.0	---	---	32.8	5	15	2.0	---
8.	3.3	---	18.5	---	---	41.5	4	10	3.5	---
9.	3.2	---	14.0	---	---	32.2	4	5	3.0	---
10.	3.4	---	10.5	---	---	25.7	4	15	6.0	---
11.	3.2	---	13.0	---	---	31.9	4	5	2.0	---
12.	3.1	---	10.0	---	---	13.6	5	5	1.0	---
13.	3.3	---	17.0	---	---	49.8	5	15	3.0	---
14.	3.2	---	20.0	---	---	23.7	4	5	2.5	---
15.	3.1	---	28.5	---	---	19.4	5	90	1.5	---
16.	3.3	---	12.0	---	---	23.7	4	15	3.0	---
17.	3.1	---	17.5	---	---	34.3	4	5	2.0	---
18.	3.3	---	26.5	---	---	33.4	5	30	3.5	---
19.	3.4	---	18.0	---	---	32.6	3	5	5.0	---
20.	3.1	---	14.5	---	---	31.7	4	20	1.5	---

TABLE IV

Artemisia tridentata   Study Area Shoshoni Ant. #7   Date 24 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.4	5.1	22.0	---	---	27.0	3	0	3.0	5.5
2.	3.5	5.2	22.5	---	---	44.3	5	20	3.5	9.0
3.	3.4	5.1	13.0	---	---	30.2	5	60	2.5	3.0
4.	3.4	5.1	21.0	---	---	24.8	4	5	3.0	7.0
5.	3.4	5.1	12.5	---	---	23.9	3	2	2.5	3.5
6.	3.4	5.1	30.0	---	---	41.0	4	5	3.0	7.0
7.	3.4	5.1	20.0	---	---	32.8	5	15	2.5	5.0
8.	3.4	5.1	22.5	---	---	41.5	4	10	2.5	5.5
9.	3.4	5.1	20.0	---	---	32.2	4	5	3.0	7.0
10.	3.5	5.2	16.0	---	---	25.7	4	15	4.0	10.5
11.	3.4	5.1	14.5	---	---	31.9	4	5	2.5	3.0
12.	3.3	---	9.5	---	---	13.6	5	5	1.0	---
13.	3.4	5.1	19.0	---	---	49.8	5	15	3.0	6.5
14.	3.4	5.1	25.0	---	---	23.7	4	5	4.0	5.1
15.	3.4	---	27.5	---	---	19.4	5	90	1.5	---
16.	3.5	---	11.0	---	---	23.7	4	15	3.5	---
17.	3.4	5.1	19.5	---	---	34.3	4	5	2.5	4.0
18.	3.5	5.2	32.0	---	---	33.4	5	30	3.5	10.0
19.	3.5	5.2	23.0	---	---	32.6	3	5	4.5	10.5
20.	3.4	5.1	13.0	---	---	31.7	4	20	2.5	4.5

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 14 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.7	5.5	24.6	---	---	27.0	3	0	2.0	8.5
2.	3.7	5.5	21.5	---	---	44.3	5	20	4.0	10.5
3.	3.6	5.4	15.5	---	---	30.2	5	60	3.0	5.5
4.	3.6	5.4	23.5	---	---	24.8	4	5	3.0	9.0
5.	3.6	5.3	15.5	---	---	23.9	3	2	2.5	4.5
6.	3.7	5.5	34.0	---	---	41.0	4	5	4.5	11.0
7.	3.7	5.5	24.0	---	---	32.8	5	15	2.0	8.0
8.	3.7	5.5	25.0	---	---	41.5	4	10	3.0	8.0
9.	3.7	5.5	22.5	---	---	32.2	4	5	3.0	7.5
10.	3.7	5.5	22.0	---	---	25.7	4	15	6.0	13.5
11.	3.6	5.4	16.0	---	---	31.9	4	5	2.5	6.0
12.	3.7	---	11.0	---	---	13.6	5	5	1.0	---
13.	3.7	5.5	21.5	---	---	49.8	5	15	3.0	8.0
14.	3.7	5.4	25.0	---	---	23.7	4	5	2.5	7.0
15.	3.7	5.3	26.5	---	---	19.4	5	90	1.5	2.0
16.	3.7	---	8.0	---	---	23.7	4	75	3.0	---
17.	3.6	5.4	19.0	---	---	34.3	4	5	1.0	4.5
18.	3.7	5.6	35.0	---	---	33.4	5	30	3.0	12.0
19.	3.7	5.4	25.5	---	---	32.6	3	5	3.0	9.0
20.	3.6	5.4	12.5	---	---	31.7	4	20	1.5	7.0

TABLE IV

Artemisia tridentata   Study Area Shoshoni Ant. #7   Date 29 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.0	5.6	26.5	---	---	27.0	3	0	3.5	9.0
2.	4.0	5.6	23.0	---	---	44.3	5	20	4.5	10.5
3.	4.0	5.7	14.0	---	---	30.2	5	60	3.5	5.5
4.	4.0	5.7	23.0	---	---	24.8	4	5	5.5	9.5
5.	4.0	5.6	14.5	---	---	23.9	3	2	3.0	6.0
6.	4.0	5.6	34.5	---	---	41.0	4	5	4.0	10.0
7.	4.0	5.6	13.0	---	---	32.8	5	15	2.5	6.5
8.	4.1	5.7	26.0	---	---	41.5	4	10	3.5	8.0
9.	4.0	5.6	19.0	---	---	32.2	4	5	3.0	7.5
10.	4.1	5.7	22.0	---	---	25.7	4	15	7.5	15.0
11.	4.0	5.6	17.0	---	---	31.9	4	5	2.5	5.5
12.	4.2	---	11.0	---	---	13.6	5	5	1.0	---
13.	4.0	5.7	21.0	---	---	49.8	5	15	3.0	8.5
14.	4.1	5.6	25.0	---	---	23.7	4	5	3.5	7.5
15.	4.0	5.6	26.5	---	---	19.4	5	90	2.0	2.5
16.	4.1	---	8.5	---	---	23.7	4	15	3.0	---
17.	4.0	5.6	18.0	---	---	34.3	4	5	2.0	4.5
18.	4.1	5.7	35.5	---	---	33.4	5	30	3.5	12.0
19.	4.0	5.7	26.0	---	---	32.6	3	5	3.5	9.5
20.	4.1	5.6	12.5	---	---	31.7	4	20	2.0	6.0

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 25 October 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.2	10.5	26.5	---	---	27.0	3	0	3.4	9.0
2.	14.2	10.5	23.0	---	---	44.3	5	20	4.5	10.5
3.	14.2	10.5	14.0	---	---	30.2	5	60	3.5	5.5
4.	14.2	10.6	23.0	---	---	24.8	4	5	5.5	9.5
5.	14.2	10.5	14.0	---	---	23.9	3	2	3.0	6.0
6.	14.2	10.4	34.5	---	---	41.0	4	5	4.0	10.0
7.	14.2	10.5	13.0	---	---	32.8	5	15	2.5	6.5
8.	14.3	10.5	26.0	---	---	41.5	4	10	3.5	8.0
9.	14.2	10.6	19.0	---	---	32.2	4	5	3.0	7.5
10.	14.3	10.6	22.0	---	---	25.7	4	15	7.5	15.5
11.	14.2	10.5	17.0	---	---	31.9	4	5	2.5	5.5
12.	14.4	---	11.0	---	---	13.6	5	5	1.0	---
13.	14.2	10.5	21.0	---	---	49.8	5	15	3.0	8.5
14.	14.3	10.6	25.0	---	---	23.7	4	5	3.5	7.5
15.	14.2	10.5	26.5	---	---	19.4	5	90	2.0	2.5
16.	14.3	---	8.5	---	---	23.7	4	15	3.0	---
17.	14.2	10.4	18.0	---	---	34.3	4	5	2.0	4.5
18.	14.3	10.5	35.5	---	---	33.4	5	30	3.5	12.0
19.	14.2	10.5	26.0	---	---	32.6	3	5	3.5	9.5
20.	14.3	10.6	12.5	---	---	31.7	4	20	2.0	6.0

TABLE IV

Artemisia tridentata   Study Area Shoshoni Ant. #7   Date 15 November 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	14.8	15.9	26.5	---	---	27.0	3	0	3.4	9.0	
2.	14.8	15.9	23.0	---	---	44.3	5	20	4.5	10.5	
3.	14.8	15.9	14.0	---	---	30.2	5	60	3.5	5.5	
4.	14.8	15.9	23.0	---	---	24.8	4	5	5.5	9.5	Very little seed set
5.	14.8	15.9	14.0	---	---	23.9	3	2	3.0	6.0	
6.	14.8	15.9	34.5	---	---	41.0	4	5	4.0	10.0	
7.	14.8	15.9	13.0	---	---	32.8	5	15	2.5	6.5	
8.	14.8	15.9	26.0	---	---	41.5	4	10	3.5	8.0	
9.	14.8	15.9	19.0	---	---	32.2	4	5	3.0	7.5	
10.	14.8	15.9	22.0	---	---	25.7	4	15	7.5	15.5	
11.	14.8	15.9	17.0	---	---	31.9	4	5	2.5	5.5	
12.	14.8	---	11.0	---	---	13.6	5	5	1.0	---	
13.	14.8	15.9	21.0	---	---	49.8	5	15	3.0	8.5	
14.	14.8	15.9	25.0	---	---	23.7	4	5	3.5	7.5	
15.	14.8	15.9	26.5	---	---	19.4	5	90	2.0	2.5	
16.	14.8	---	8.5	---	---	23.7	4	15	3.0	---	
17.	14.8	15.9	18.0	---	---	34.3	4	5	2.0	4.5	
18.	14.8	15.9	35.5	---	---	33.4	5	30	3.5	12.0	
19.	14.8	15.9	26.0	---	---	32.6	3	5	3.5	9.5	
20.	14.8	15.9	12.5	---	---	31.7	4	20	2.0	6.0	

TABLE IV

Artemisia tridentata Study Area Shoshoni Ant. #7 Date 30 December 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.8	15.9	26.5	---	---	27.0	3	0	3.4	9.0
2.	14.8	15.9	33.0	---	---	44.3	5	20	4.5	10.5
3.	14.8	15.9	14.0	---	---	30.2	5	60	3.5	5.5
4.	14.8	15.9	23.0	---	---	24.8	4	5	5.5	9.5
5.	14.8	15.9	14.0	---	---	23.9	3	2	3.0	6.0
6.	14.8	15.9	34.5	---	---	41.0	4	5	4.0	10.0
7.	14.8	15.9	13.0	---	---	32.8	5	15	2.5	6.5
8.	14.8	15.9	26.0	---	---	41.5	4	10	3.5	8.0
9.	14.8	15.9	19.0	---	---	32.2	4	5	3.0	7.5
10.	14.8	15.9	22.0	---	---	25.7	4	15	7.5	15.5
11.	14.8	15.9	17.0	---	---	31.9	4	5	2.5	5.5
12.	14.8	---	11.0	---	---	13.6	5	5	1.0	---
13.	14.8	15.9	21.0	---	---	49.8	5	15	3.0	8.5
14.	14.8	15.9	25.0	---	---	23.7	4	5	3.5	7.5
15.	14.8	15.9	26.5	---	---	19.4	5	90	2.0	2.5
16.	14.8	---	8.5	---	---	23.7	4	15	3.0	---
17.	14.8	15.9	18.0	---	---	34.3	4	5	2.0	4.5
18.	14.8	15.9	35.5	---	---	33.4	5	30	3.5	12.0
19.	14.8	15.9	26.0	---	---	32.6	3	5	3.5	9.5
20.	14.8	15.9	12.5	---	---	31.7	4	20	2.0	6.0

TABLE IV

Agropyron smithii Study Area Sweetwater Date 25 January 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.		NO						
6.								
7.			NEW					
8.								
9.				GROWTH				
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Sweetwater Date 1 March 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS	
	VEG.	REPR.						
1.								
2.								
3.								
4.								
5.								
6.								
7.		NO						
8.								
9.			NEW					
10.								
11.				GROWTH				
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

TABLE IV

Agropyron smithii Study Area Sweetwater Date 28 March 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	17.0	---	.2	22.5	---	---	1
2.	17.0	---	.2	12.0	---	---	1
3.	17.0	---	.2	9.9	---	---	1
4.	17.0	---	.2	8.9	---	---	1
5.	17.0	---	.3	20.7	---	---	2
6.	17.0	---	.1	11.2	---	---	2
7.	17.0	---	.2	16.3	---	---	3
8.	17.0	---	.2	12.6	---	---	1
9.	17.0	---	.1	12.0	---	---	2
10.	17.0	---	.2	15.3	---	---	2
11.	17.0	---	.2	16.1	---	---	1
12.	17.0	---	.2	14.4	---	---	2
13.	17.0	---	.2	11.5	---	---	1
14.	17.0	---	.2	15.8	---	---	1
15.	17.0	---	.2	22.8	---	---	4
16.	17.0	---	.3	16.7	---	---	6
17.	17.0	---	.3	20.1	---	---	1
18.	17.0	---	.2	16.2	---	---	4
19.	17.0	---	.2	14.2	---	---	4
20.	17.0	---	.2	15.8	---	---	3

TABLE IV

Agropyron smithii Study Area Sweetwater Date 24 May 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.3	---	.3	19.5	---	---	1
2.	3.5	---	.2	8.6	---	---	1
3.	3.8	---	.2	18.2	---	---	1
4.	2.9	---	.1	8.7	---	---	1
5.	4.1	---	.3	15.3	---	---	
6.	2.8	---	.1	5.5	---	---	2
7.	4.1	---	.1	10.5	---	---	3
8.	3.9	---	.2	14.0	---	---	1
9.	4.4	---	.3	13.2	---	---	2
10.	4.0	---	.2	12.7	---	---	2
11.	3.8	---	.2	11.4	---	---	1
12.	3.4	---	.3	13.2	---	---	2
13.	4.1	---	.5	16.2	---	---	1
14.	4.1	---	.3	9.5	---	---	1
15.	3.9	---	.2	19.7	---	---	4
16.	3.8	---	.3	14.0	---	---	6
17.	3.7	---	.3	18.4	---	---	1
18.	3.8	---	.3	13.2	---	---	4
19.	3.8	---	.2	12.6	---	---	4
20.	3.8	---	.2	14.2	---	---	3

TABLE IV

Agropyron smithii Study Area Sweetwater Date 11 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.3	---	.3	2.1	---	---	1
2.	3.9	---	.2	9.5	---	---	1
3.	3.8	---	.2	2.1	---	---	1
4.	3.3	---	.1	11.8	---	---	1
5.	3.9	---	.3	18.3	---	---	2
6.	4.1	---	.3	2.8	---	---	2
7.	4.0	---	.1	10.4	---	---	3
8.	3.7	---	.2	15.9	---	---	1
9.	4.0	---	.2	15.7	---	---	2
10.	3.9	---	.2	14.3	---	---	2
11.	3.9	---	.2	15.1	---	---	1
12.	3.8	---	.2	15.5	---	---	2
13.	4.0	---	.4	20.4	---	---	1
14.	4.0	---	.4	10.6	---	---	1
15.	3.9	---	.2	23.1	---	---	4
16.	3.8	---	.2	16.2	---	---	6
17.	4.1	---	.3	22.6	---	---	1
18.	4.2	---	.3	15.4	---	---	4
19.	3.8	---	.1	10.0	---	---	4
20.	4.3	---	.2	19.1	---	---	3

TABLE IV

Agropyron smithii Study Area Sweetwater Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	4.4	---	.3	23.4	---	---	1
2.	4.1	---	.2	9.5	---	---	1
3.	4.2	---	.2	22.3	---	---	1
4.	3.8	---	.1	11.7	---	---	1
5.	4.3	---	.3	22.2	---	---	2
6.	4.4	---	.3	28.4	---	---	2
7.	3.9	---	.1	13.8	---	---	3
8.	3.9	---	.1	16.2	---	---	1
9.	4.3	---	.2	17.6	---	---	2
10.	3.9	---	.1	18.6	---	---	2
11.	4.2	---	.2	13.5	---	---	1
12.	4.3	---	.2	18.7	---	---	2
13.	4.5	5.0	.4	20.3	---	---	1
14.	4.3	---	.3	11.6	---	---	1
15.	4.3	---	.2	29.2	---	---	4
16.	4.2	---	.3	12.7	---	---	6
17.	4.4	---	.3	21.6	---	---	1
18.	4.4	---	.2	15.2	---	---	4
19.	4.3	---	.2	14.6	---	---	4
20.	3.9	---	.2	19.0	---	---	3

TABLE IV

Agropyron smithii Study Area Sweetwater Date 30 July 1975

PLANT NO.	PHENO. STAGE SCORE VEG.	REPR.	MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKELETS/ CULM	NOS. OF VEG. PLANTS
1.	14.1	5.2	.4	23.6	---	---	1
2.	14.4	---	.2	9.8	---	---	1
3.	14.7	---	.2	23.4	---	---	1
4.	14.4	---	.1	13.0	---	---	1
5.	14.3	---	.2	23.2	---	---	2
6.	14.4	---	.3	27.7	---	---	2
7.	14.3	---	.2	10.5	---	---	3
8.	14.3	---	.2	15.8	---	---	1
9.	14.3	---	.2	16.4	---	---	2
10.	14.3	---	.2	18.1	---	---	2
11.	14.4	---	.2	16.8	---	---	1
12.	14.2	---	.2	18.9	---	---	2
13.	14.3	---	.4	20.5	---	---	1
14.	14.4	---	.3	12.1	---	---	1
15.	14.4	---	.2	29.3	---	---	4
16.	14.3	---	.2	17.0	---	---	6
17.	14.4	---	.2	23.6	---	---	1
18.	14.3	---	.2	18.3	---	---	4
19.	14.3	---	.2	13.5	---	---	4
20.	14.2	---	.2	20.6	---	---	3

TABLE IV

Agropyron smithii Study Area Sweetwater Date 25 October 1976

PLANT NO.	PHENO. STAGE SCORE		MAX. LEAF WIDTH cm.	MAX. LEAF HGTH. cm.	MAX. SPIKE HGTH. cm.	NOS. SPIKE-LETS/ CULM	NOS. OF VEG. PLANTS
	VEG.	REPR.					
1.	14.9	15.9	.4	23.6	31.2	7	1
2.	14.9	---	.2	9.8	---	---	1
3.	14.9	---	.2	23.4	---	---	1
4.	14.9	---	.1	13.0	---	---	1
5.	14.9	---	.2	23.2	---	---	2
6.	14.9	---	.3	27.7	---	---	2
7.	14.9	---	.2	10.5	---	---	3
8.	14.9	---	.2	15.8	---	---	1
9.	14.9	---	.2	16.4	---	---	2
10.	14.9	---	.2	18.1	---	---	2
11.	14.9	---	.2	16.8	---	---	1
12.	14.9	---	.2	18.9	---	---	2
13.	14.9	---	.4	20.5	---	---	1
14.	14.9	---	.3	12.1	---	---	1
15.	14.9	---	.2	29.3	---	---	4
16.	14.9	---	.2	17.0	---	---	6
17.	14.9	---	.2	23.6	---	---	1
18.	14.9	---	.2	18.3	---	---	4
19.	14.9	---	.2	13.5	---	---	4
20.	14.9	---	.2	20.6	---	---	3

TABLE IV

Artemisia nova Study Area Sweetwater Date 25 January 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.			NO								
7.											
8.				NEW							
9.											
10.					GROWTH						
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia nova Study Area Sweetwater Date 1 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.											
7.			NO								
8.											
9.				NEW							
10.											
11.					GR	OWTH					
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia nova Study Area Sweetwater Date 28 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	14.8	---	10.9	---	---	11.8	5	75	---	---	
2.	14.8	15.9	8.5	---	---	21.5	5	55	---	---	
3.	14.8	15.9	8.7	---	---	31.0	4	20	---	---	
4.	14.8	15.9	17.1	---	---	45.8	4	5	---	---	
5.	14.8	---	4.3	---	---	7.7	2	5	---	---	
6.	14.8	15.9	9.6	---	---	21.0	3	10	---	---	
7.	14.8	---	11.0	---	---	13.9	5	30	---	---	
8.	14.0	15.9	12.1	---	---	18.2	5	80	---	---	
9.	14.8	15.9	14.6	---	---	46.3	4	5	---	---	
10.	14.8	15.9	11.2	---	---	26.0	4	2	---	---	
11.	14.8	15.9	16.1	---	---	27.4	3	0	---	---	
12.	14.8	15.9	15.8	---	---	22.2	4	5	---	---	
13.	14.8	15.9	23.8	---	---	59.2	4	0	---	---	
14.	14.8	---	4.8	---	---	6.5	2	0	---	---	
15.	14.8	15.9	6.8	---	---	14.8	5	60	---	---	
16.	14.8	---	4.5	---	---	10.3	3	5	---	---	
17.	14.8	---	12.0	---	---	40.4	4	15	---	---	
18.	14.8	---	6.3	---	---	32.9	4	5	---	---	
19.	14.8	---	7.4	---	---	13.2	5	20	---	---	
20.	14.8	15.9	13.8	---	---	39.2	3	2	---	---	

TABLE IV

Artemisia nova Study Area Sweetwater Date 29 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	3.0	---	12.0	---	---	11.8	5	75	.5	---	
2.	3.0	---	9.0	30.0	22.0	26.0	4	65	.5	---	
3.	3.1	---	9.5	---	---	31.0	4	20	1.0	---	
4.	3.1	---	12.5	---	---	45.8	4	5	1.0	---	
5.	3.1	---	6.0	---	---	7.7	2	5	1.0	---	
6.	3.1	---	7.5	---	---	21.0	3	10	1.0	---	
7.	3.0	---	8.5	---	---	13.9	5	30	.5	---	
8.	3.0	---	8.5	---	---	18.2	5	80	.5	---	
9.	3.1	---	14.0	---	---	46.3	4	5	1.0	---	
10.	3.2	---	5.5	---	---	26.0	4	2	1.5	---	
11.	3.2	---	11.5	---	---	27.4	3	0	1.5	---	
12.	3.2	---	9.5	---	---	22.2	4	5	1.5	---	
13.	3.1	---	15.5	---	---	59.2	4	2	1.0	---	
14.	3.1	---	4.0	---	---	6.5	2	0	1.0	---	
15.	3.1	---	4.0	---	---	14.8	5	60	1.0	---	
16.	3.1	---	3.8	---	---	10.3	3	5	1.0	---	
17.	3.0	---	10.0	---	---	40.4	4	15	.5	---	
18.	3.0	---	9.0	---	---	32.9	4	5	.5	---	
19.	3.0	---	7.5	---	---	13.2	5	20	.5	---	Dying
20.	3.1	---	10.0	---	---	37.2	3	2	1.0	---	

TABLE IV

Artemisia nova Study Area Sweetwater Date 11 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.3	---	12	---	---	11.8	5	75	2.5	---
2.	3.3	---	9	---	---	21.5	5	55	3	---
3.	3.4	---	11.5	---	---	31.0	4	20	3.5	---
4.	3.4	---	13.5	---	---	45.8	4	5	4	---
5.	3.2	---	5	---	---	7.7	2	5	1	---
6.	3.4	---	7	---	---	21.0	3	10	4	---
7.	3.2	---	10	---	---	13.9	5	30	1	---
8.	3.2	---	8.5	---	---	18.2	5	80	2	---
9.	3.3	---	13.0	---	---	46.3	4	5	2	---
10.	3.4	---	8.5	---	---	26.0	4	2	3.5	---
11.	3.4	---	12	---	---	27.4	3	0	4.5	---
12.	3.4	---	12	---	---	22.2	4	5	4	---
13.	3.3	---	15.5	---	---	59.2	4	2	2	---
14.	3.4	---	5.5	---	---	6.5	2	0	3.5	---
15.	3.2	---	6.5	---	---	14.8	5	60	1	---
16.	3.3	---	4	---	---	10.3	3	5	2	---
17.	3.1	---	9.5	---	---	40.4	4	15	5	---
18.	3.3	---	10	---	---	32.9	4	5	2.5	---
19.	3.1	---	8	---	---	13.2	5	20	.5	-
20.	3.4	---	10	---	---	37.2	3	2	3.5	---

TABLE IV

Artemisia nova Study Area Sweetwater Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.6	0	11.5	---	---	11.8	5	75	1.0	---
2.	3.6	5.2	12.5	---	---	21.5	5	55	1.5	6
3.	3.7	5.3	14.5	---	---	31.0	4	20	1.5	7.5
4.	3.6	5.2	18.5	---	---	45.8	4	5	1.5	6.5
5.	3.6	0	5.5	---	---	7.7	2	5	1.0	0
6.	3.6	5.2	13	---	---	21.0	3	10	1.5	5
7.	3.6	5.2	9.5	---	---	13.9	5	30	1.0	3
8.	3.6	5.2	12.5	---	---	18.2	5	80	1.5	4
9.	3.7	5.3	16.5	---	---	46.3	4	5	2.0	7
10.	3.6	5.7	10.5	---	---	26.0	4	2	1.5	6.5
11.	3.6	5.2	14.5	---	---	27.4	3	0	2.0	8.0
12.	3.6	5.2	15	---	---	22.2	4	5	2.0	8.5
13.	3.6	5.1	16.5	---	---	59.2	4	2	1.5	3.0
14.	3.6	5.1	7.5	---	---	6.5	2	0	1.5	5.5
15.	3.6	0	7	---	---	14.8	5	60	1.0	0
16.	3.6	5.1	8.5	---	---	10.3	3	5	1.0	5.0
17.	3.6	0	9.5	---	---	40.4	4	15	1.0	0
18.	3.6	5.1	11.5	---	---	32.9	4	5	1.0	2.0
19.	3.6	5.0	9.0	---	---	13.2	5	20	.5	.5
20.	3.6	5.1	13.0	---	---	37.2	3	2	1.5	6.5

TABLE IV

Artemisia nova — Study Area Sweetwater — Date 30 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.1	5.2	16.0	---	---	11.8	5	75	1.0	7.5
2.	4.1	5.7	15.0	---	---	21.5	5	55	1.0	8.0
3.	4.2	5.7	21.0	---	---	31.0	4	20	1.0	11.5
4.	4.1	5.7	20.5	---	---	45.8	4	5	1.5	11.0
5.	4.2	---	5.0	---	---	7.7	2	5	1.0	---
6.	4.1	5.7	15.0	---	---	21.0	3	10	1.5	9.5
7.	4.2	---	12.5	---	---	13.9	5	30	1.0	---
8.	4.3	5.7	16.0	---	---	18.2	5	80	1.0	9.0
9.	4.1	5.7	23.0	---	---	46.3	4	5	1.5	13.5
10.	4.1	5.7	16.5	---	---	26.0	4	2	1.5	12.0
11.	4.1	5.7	18.5	---	---	27.4	3	0	2.5	11.0
12.	4.1	5.7	15.5	---	---	22.2	4	5	1.5	11.0
13.	4.1	5.7	22.0	---	---	59.2	4	2	1.5	2.0
14.	4.1	5.6	14.5	---	---	6.5	2	0	1.0	13.0
15.	4.1	---	7.5	---	---	14.8	5	60	1.0	---
16.	4.1	5.7	10.5	---	---	10.3	3	5	1.0	8.5
17.	4.2	---	9.5	---	---	40.4	4	15	1.0	---
18.	4.1	5.7	10.5	---	---	32.9	4	5	1.0	4.5
19.	4.3	---	8.0	---	---	13.2	5	85	.5	---
20.	4.1	5.7	19.5	---	---	37.2	3	2	1.5	11.0

TABLE IV

Artemisia nova Study Area Sweetwater Date 25 October 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.	14.2	15.2	16.0	---	---	11.8	5	75	1.0	7.5	
2.	14.2	15.2	15.0	---	---	21.5	5	55	1.0	8.0	
3.	14.3	15.2	21.0	---	---	31.0	4	20	1.0	11.5	
4.	14.2	15.2	20.5	---	---	45.8	4	5	1.5	11.0	
5.	14.3	---	5.0	---	---	7.7	2	5	1.0	---	
6.	14.2	15.2	15.0	---	---	21.0	3	10	1.5	9.5	
7.	14.3	---	12.5	---	---	13.9	5	30	1.0	---	
8.	14.4	15.2	16.0	---	---	18.7	5	80	1.0	9.0	
9.	14.2	15.2	23.0	---	---	46.3	4	5	1.5	13.5	
10.	14.2	15.2	16.5	---	---	26.0	4	2	1.5	12.0	
11.	14.2	15.2	18.5	---	---	27.4	3	0	2.5	11.0	
12.	14.2	15.2	19.2	---	---	22.2	4	5	1.5	11.0	
13.	14.2	15.2	22.0	---	---	59.2	4	2	1.5	7.0	
14.	14.2	15.1	14.5	---	---	6.5	2	0	1.0	13.0	
15.	14.2	---	7.5	---	---	14.8	5	60	1.0	---	
16.	14.2	15.2	10.5	---	---	10.3	3	5	1.0	8.5	
17.	14.3	---	9.5	---	---	40.4	4	15	1.0	4.5	
18.	14.2	15.2	10.5	---	---	32.9	4	5	1.0	4.5	
19.	14.4	---	8.0	---	---	13.2	5	85	.5	---	
20.	14.2	15.2	19.5	---	---	37.2	3	2	1.5	11.0	

TABLE IV

Artemisia tridentata Study Area Sweetwater Date 25 Jan 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.										
2.										
3.										
4.										
5.										
6.										
7.		NO								
8.										
9.			NEW							
10.										
11.					GROWTH					
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										

TABLE IV

Artemisia tridentata   Study Area Sweetwater   Date 1 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.	
	VEG.	REPR.									
1.											
2.											
3.											
4.											
5.											
6.			NO								
7.											
8.				NEW							
9.											
10.											
11.					GROWTH						
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

TABLE IV

Artemisia tridentata Study Area Sweetwater Date 28 March 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.8	15.9	18.3	---	---	37.4	4	5	---	---
2.	14.8	---	10.0	---	---	9.7	5	20	---	---
3.	14.8	15.9	20.0	---	---	37.1	4	15	---	---
4.	14.8	15.9	39.6	---	---	61.0	4	5	---	---
5.	14.8	15.9	19.8	---	---	19.4	4	10	---	---
6.	14.8	15.9	20.9	---	---	28.8	4	10	---	---
7.	14.8	---	16.2	---	---	24.2	5	20	---	---
8.	14.8	---	8.3	---	---	16.4	4	1	---	---
9.	14.8	15.9	20.1	---	---	37.5	5	20	---	---
10.	14.8	15.9	30.2	---	---	19.7	5	40	---	---
11.	14.8	15.9	35.8	---	---	94.5	4	3	---	---
12.	14.8	---	15.8	---	---	12.5	5	55	---	---
13.	14.8	15.9	16.6	---	---	19.8	3	0	---	---
14.	14.8	15.9	12.1	---	---	19.9	5	20	---	---
15.	14.8	15.9	37.0	---	---	82.0	4	2	---	---
16.	14.8	---	11.0	---	---	10.2	5	30	---	---
17.	14.8	---	9.4	---	---	60.0	4	10	---	---
18.	14.8	15.9	37.8	---	---	82.0	4	15	---	---
19.	14.8	15.9	19.1	---	---	80.9	4	5	---	---
20.	14.8	---	12.0	---	---	21.5	5	25	---	---

TABLE IV

Artemisia tridentata Study Area Sweetwater Date 29 May 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.1	---	14.5	---	---	37.4	4	5	2.0	---
2.	3.0	---	9.5	---	---	9.7	5	20	1.0	---
3.	3.1	---	21.0	---	---	37.1	4	15	1.5	---
4.	3.2	---	35.5	---	---	61.0	4	5	3.0	---
5.	3.1	---	18.0	---	---	19.4	4	10	1.5	---
6.	3.0	---	15.5	---	---	28.8	5	10	1.5	---
7.	3.2	---	15.0	---	---	24.2	5	20	2.5	---
8.	3.1	---	8.0	---	---	16.4	4	1	1.0	---
9.	3.1	---	17.0	---	---	37.5	5	20	1.5	---
10.	3.1	---	23.0	---	---	19.7	5	40	1.0	---
11.	3.1	---	39.0	---	---	94.5	4	3	1.5	---
12.	3.0	---	16.0	---	---	12.5	5	55	.5	---
13.	3.1	---	13.5	---	---	19.8	3	0	1.0	---
14.	3.0	---	11.5	---	---	19.9	5	20	1.6	---
15.	3.1	---	33.0	---	---	85.0	4	2	2.0	---
16.	3.1	---	12.0	---	---	10.2	5	30	1.5	---
17.	3.0	---	9.0	---	---	60.0	4	10	1.0	---
18.	3.1	---	34.0	---	---	82.0	4	15	2.0	---
19.	3.1	---	18.0	---	---	80.9	4	5	2.0	---
20.	3.1	---	11.0	---	---	21.5	5	25	1.5	---

TABLE IV

Artemisia tridentata Study Area Sweetwater Date 11 June 1976

PLANT NO.	PHENO. STAGE SCORE VEG.	REPR.	PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
1.	3.3	---	15.5	---	---	37.4	4	5	3	---
2.	3.2	---	6	---	---	9.7	5	20	1.5	---
3.	3.3	---	2.0	---	---	37.1	4	15	3.5	---
4.	3.3	---	3.5	---	---	61.0	4	5	3	---
5.	3.2	---	18.5	---	---	19.4	4	10	1.5	---
6.	3.2	---	1.6	---	---	28.8	4	10	1.5	---
7.	3.2	---	1.8	---	---	24.2	5	20	2.5	---
8.	3.2	---	6.5	---	---	16.4	4	1	2	---
9.	3.4	---	15.5	---	---	37.5	5	80	3.5	---
10.	3.1	---	2.2	---	---	19.7	5	40	1	---
11.	3.4	---	4.0	---	---	94.5	4	3	5	---
12.	3.2	---	16.5	---	---	12.5	5	35	2.5	---
13.	3.3	---	17.5	---	---	19.8	3	0	3	---
14.	3.2	---	12.5	---	---	19.9	5	20	2.5	---
15.	3.4	---	3.2	---	---	85.0	4	2	4	---
16.	3.3	---	10	---	---	10.2	5	30	2.5	---
17.	3.2	---	10	---	---	60.0	4	10	1.5	---
18.	3.3	---	35.5	---	---	82.0	4	15	3	---
19.	3.3	---	25	---	---	80.9	4	5	3.5	---
20.	3.2	---	11	---	---	21.5	5	25	2	---

TABLE IV

Artemisia tridentata Study Area Sweetwater Date 25 June 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	3.4	5.1	17.5	---	---	37.4	4	5	2.0	6.0
2.	3.4	---	9.5	---	---	9.2	5	20	1.0	---
3.	3.4	5.1	21.0	---	---	37.1	4	15	3.0	5.0
4.	3.4	5.1	35.0	---	---	61.0	4	5	3.0	6.0
5.	3.4	5.1	21.5	---	---	19.4	4	10	2.0	4.0
6.	3.4	5.0	16.5	---	---	28.8	4	10	2.0	2.5
7.	3.4	5.1	17.0	---	---	24.2	5	20	2.0	5.5
8.	3.4	---	9.5	---	---	16.4	4	1	2.5	---
9.	3.4	5.1	19.5	---	---	37.5	5	20	2.5	6.0
10.	3.4	5.1	27.5	---	---	19.7	5	40	2.5	3.0
11.	3.4	5.2	42.0	---	---	94.5	4	3	3.5	5.0
12.	3.4	---	17.0	---	---	12.5	5	55	2.0	---
13.	3.4	5.1	17.0	---	---	19.8	3	0	3.0	6.5
14.	3.4	---	13.0	---	---	19.9	5	20	2.5	---
15.	3.4	5.1	38.0	---	---	85.0	4	2	4.0	6.5
16.	3.4	5.0	10.0	---	---	10.2	5	30	2.5	3.0
17.	3.4	5.0	12.0	---	---	60.0	4	10	1.5	2.5
18.	3.4	5.2	38.5	---	---	82.0	4	15	3.0	6.0
19.	3.4	5.2	25.0	---	---	80.9	4	5	2.5	7.0
20.	3.4	5.0	11.0	---	---	21.5	5	25	2.0	2.5

TABLE IV

Artemisia tridentata　Study Area Sweetwater　Date 30 July 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	4.0	5.7	22.5	---	---	32.4	4	5	3.0	8.5
2.	4.0	---	8.0	---	---	9.7	5	20	1.5	---
3.	4.0	5.6	21.0	---	---	37.1	4	15	2.0	6.5
4.	4.1	5.7	40.0	---	---	61.0	4	5	3.0	14.5
5.	4.0	5.6	25.5	---	---	19.4	4	10	3.0	7.5
6.	4.0	5.6	19.0	---	---	28.5	4	10	1.5	6.5
7.	4.0	5.6	17.5	---	---	24.2	5	20	3.0	9.5
8.	4.0	---	9.5	---	---	16.4	4	1	2.0	---
9.	4.1	5.7	25.5	---	---	37.5	5	20	4.0	11.0
10.	4.0	5.7	31.0	---	---	19.7	5	40	4.0	5.5
11.	4.1	5.7	51.5	---	---	94.5	4	3	4.0	8.5
12.	4.0	5.6	14.0	---	---	12.5	5	55	3.0	4.5
13.	4.0	5.6	19.5	---	---	19.8	3	0	4.0	9.5
14.	4.0	5.6	13.0	---	---	19.9	5	20	2.0	8.5
15.	4.1	5.6	40.0	---	---	85.0	4	2	6.0	11.0
16.	4.0	---	11.5	---	---	10.2	5	30	3.0	---
17.	4.0	---	13.0	---	---	60.0	4	10	3.0	---
18.	4.1	5.6	35.5	---	---	82.0	4	15	5.0	8.0
19.	4.1	5.6	28.0	---	---	80.9	4	5	4.0	11.0
20.	4.1	5.6	10.0	---	---	21.5	5	25	2.0	4.0

TABLE IV

Artemisia tridentata Study Area Sweetwater Date 25 October 1975

PLANT NO.	PHENO. STAGE SCORE		PLANT HGHT. cm.	PLANT LNGTH. cm.	PLANT WIDTH cm.	PLANT DIAM. cm.	PLANT AGE CLASS	DEAD BRANCH PER-CENT	NEW VEG. TWIG LNGTH. cm.	NEW SEED STALK LNGTH. cm.
	VEG.	REPR.								
1.	14.0	15.1	22.5	---	---	37.4	4	5	3.0	8.5
2.	14.0	---	8.0	---	---	9.7	5	20	1.5	---
3.	14.0	15.0	21.0	---	---	37.1	4	15	2.0	6.5
4.	14.1	15.1	40.0	---	---	61.0	4	5	3.0	14.5
5.	14.0	15.0	25.5	---	---	19.4	4	10	3.0	7.5
6.	14.0	15.0	19.0	---	---	28.8	4	10	1.5	6.5
7.	14.0	15.0	17.5	---	---	24.2	5	20	3.0	9.5
8.	14.0	---	9.5	---	---	16.4	4	1	2.0	---
9.	14.0	15.1	25.5	---	---	37.5	5	20	4.0	11.0
10.	14.0	15.1	31.0	---	---	19.7	5	40	4.0	5.5
11.	14.1	15.1	51.5	---	---	94.5	4	3	4.0	8.5
12.	14.0	15.0	14.0	---	---	12.5	5	55	3.0	4.5
13.	14.0	15.0	19.5	---	---	18.8	3	0	4.0	9.5
14.	14.0	15.0	13.0	---	---	19.9	5	20	2.0	8.5
15.	14.1	15.0	40.0	---	---	85.0	4	2	6.0	11.0
16.	14.0	---	11.5	---	---	10.2	5	30	3.0	---
17.	14.0	---	13.0	---	---	60.0	4	10	3.0	---
18.	14.1	15.0	35.5	---	---	82.0	4	15	5.0	8.0
19.	14.1	15.0	28.0	---	---	80.9	4	5	4.0	11.0
20.	14.1	15.0	10.0	---	---	21.5	5	25	2.0	4.0

TABLE V. Phenological development dates for all species for three major growth stages - growth initiation, full bloom, seed dissemination - by exclosure for the years 1973, 1974, 1975.

		Page
Bud Kimball Exclosure		241
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Cumberland #3	"	242
Demer	"	243
Farson	"	243
Horse Creek	"	244
Mesa Antelope	"	244
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Red Wash #2		246
Shoshoni Ant. #7	"	246
Sweetwater	"	247
Upper Gov't Draw		248

TABLE V.

Exclosure	Growth Initiation			Full Bloom			Seed Dissemination		
Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Bud Kimball									
AGSM	--	Mar	Mar	--	25 Jun	30 Jun	10 Aug	10 Aug	15 Aug
ALTE	---	---	---	---	---	20 Jun	12 Jul	17 Jul	20 Jul
ARTR	---	20 May	May	25 Sep	20 Sep	Sep	---	Nov	Nov
BRTE	---	---	---	---	15 Jun	25 Jun	---	---	20 Jul
CAS	---	25 Apr	---	---	5 Jul	20 Jun	20 Jul	25 Jul	25 Jul
CRE	---	---	---	---	20 Jun	15 Jun	---	---	---
CYMO	---	---	---	---	---	---	---	---	15 Jul
DEPI	---	---	---	---	---	20 Jun	---	---	25 Jul
ERPU	---	---	---	---	---	25 Jun	---	---	25 Jul
KOCR	---	Mar	Mar	---	20 Jun	---	20 Jul	10 Jul	---
LARE	---	---	---	---	10 Jun	17 Jun	20 Jul	25 Jul	25 Jul
LERE	---	25 Apr	---	---	25 Jun	25 Jun	10 Jul	15 Jul	15 Jul
MAGR	---	5 May	---	---	15 Jun	---	---	15 Jul	---
MATA	---	---	---	---	---	23 Jun	---	---	---
OPPO	---	---	---	---	15 Jun	---	Sep	30 Aug	15 Aug
PHHO	---	---	---	---	---	10 Jun	---	---	---
PLSA	---	---	---	---	---	23 Jun	25 Jul	20 Jul	25 Jul
POSE	---	Mar	Mar	---	5 Jun	25 Jun	15 Jul	1 Jul	5 Jul
SIHY	---	Mar	Mar	---	15 Jul	10 Jul	20 Jul	30 Jul	30 Jul
SPCO	---	Mar	---	---	25 Jun	30 Jun	---	20 Jul	25 Jul
SPCR	---	---	---	---	---	30 Jun	---	---	27 Jul
STCO	---	Mar	Mar	---	25 Jun	5 Jul	25 Jul	30 Jul	30 Jul
VIO	---	---	---	---	---	15 Jun	---	---	---
Cedar Mountain									
AGCR	---	5 Mar	Apr	Jun	17 Jun	Jun	---	---	Aug
AGSP	---	---	Apr	5 Jul	30 Jun	20 Jun	---	---	5 Aug
ARHO$_2$	---	Apr	---	Jun	5 Jun	---	---	---	---
ARSP	---	Apr	---	Jul	Jul	25 Jun	---	---	Jul
ARTR	---	24 May	15 May	Sep	Sep	Sep	---	---	---
ASPU	---	Apr	Apr	---	30 May	25 May	30 Jun	17 Jun	25 Jun
ATCO	---	May	May	Jul	25 Jun	Jul	---	---	---
ATNU	---	Apr	Apr	Jun	5 Jun	5 Jun	---	---	---
CHVI	May	May	10 May	---	Aug	Aug	---	---	---
EROV	---	---	May	---	Jun	10 Jun	---	Aug	1 Aug
ERPU	---	---	10 May	Jun	15 Jun	---	Jul	Jul	Aug
EULA	---	24 May	15 May	---	Jul	15 Jul	---	---	---
HAAC	---	Apr	---	10 Jun	1 Jun	5 Jun	---	21 Jun	20 Jul
KOAM	---	11 Mar	Mar	---	Jul	10 Jul	---	---	Aug
OPPO	---	Apr	5 May	10 Jul	Jul	10 Jul	---	---	---
ORHY	---	5 Mar	---	20 Jun	20 Jun	---	Aug	---	25 Jul
PHHO	---	Apr	---	---	30 May	30 May	28 Jun	20 Jun	Jul
PHLO	---	---	---	---	30 May	15 Jun	---	15 Jun	15 Jul
POSE	---	15 Mar	---	Jun	15 Jun	15 Jun	Jul	5 Jul	Jul
SIHY	---	10 Mar	---	28 Jun	15 Jun	20 Jun	1 Aug	Jul	Aug
SILI	---	---	---	---	25 May	---	28 Jun	---	---
SPCO	---	---	---	---	15 Jun	Jul	---	---	Aug
TESP	---	Apr	10 May	Jul	Jul	Jul	---	---	Aug

TABLE V. (continued)

Exclosure	Growth Initiation			Full Bloom			Seed Dissemination		
Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Cumberland #3									
AGGL	---	10 Mar	---	15 Jun	10 Jun	---	Aug	Jun	---
AGSM	---	Apr	Mar	25 Jul	30 Jun	Jul	20 Aug	5 Aug	Aug
AGSP	---	Apr	Mar	28 Jun	25 Jun	Jul	5 Aug	30 Jul	25 Jul
AMAL	---	20 May	---	---	---	30 Jun	---	---	---
ANRO	---	May	---	---	Jun	---	Jun	20 Jun	---
$ARHO_2$	---	May	---	Jun	24 May	Jun	5 Jul	10 Jul	Jul
ARTR	Jun	20 May	May	Sep	Sep	5 Aug	---	---	---
ASCA	---	---	---	---	10 Jul	---	---	---	---
ASCI	---	May	---	---	6 Jun	10 Jun	28 Jun	25 Jun	Jul
ASDI	---	Apr	---	5 Jul	6 Jun	Jun	30 Jul	15 Jul	Jul
AST	---	---	---	---	10 Jun	12 Jun	---	20 Jul	---
CAS	---	12 Mar	---	5 Jul	30 Jun	Jun	25 Jul	---	Aug
CHVI	---	20 May	May	5 Aug	15 Jul	Jul	---	---	---
COPA	---	1 Jun	May	---	15 Jun	Jun	---	20 Jul	Jul
CORA	---	6 Jun	---	---	---	---	---	---	---
CRE	---	30 May	---	5 Jul	15 Jul	20 Jun	14 Aug	---	Jul
DEPI	---	---	---	---	---	---	---	20 Jun	---
ERMI	---	15 May	May	10 Aug	15 Jul	5 Aug	---	---	---
EROV	---	12 Mar	---	25 Jun	6 Jun	---	14 Aug	10 Jul	---
ERSU	---	---	---	---	25 Jun	---	---	25 Jul	---
MELO	---	Apr	---	5 Jul	30 May	15 Jun	---	Jul	---
OPPO	---	May	May	---	15 Jul	5 Jul	---	---	Aug
ORHY	---	12 Mar	---	5 Jul	30 Jun	---	---	---	---
PELA	---	---	---	20 Jun	15 Jun	25 Jun	10 Aug	15 Jul	Jul
PHHO	---	Mar	---	Jun	24 May	5 Jun	10 Jul	20 Jul	Jul
PHLO	---	Mar	---	Jun	6 Jun	15 Jun	10 Jul	20 Jul	Jul
POFE	---	Mar	---	Jun	15 Jun	Jul	25 Jul	10 Jul	25 Jul
POSE	---	Mar	---	2 Jul	30 Jun	30 Jun	15 Jul	5 Jul	Jul
SIHY	---	---	---	5 Jul	1 Jul	---	30 Jul	30 Jul	25 Jul
STCO	---	---	---	---	Jun	Jun	---	Jul	Jul
TECA	---	24 May	---	10 Aug	10 Jul	5 Aug	---	---	---
TRI	---	---	---	---	30 Mar	---	28 Jun	20 Jun	---
UMB	---	---	---	---	---	---	Jul	6 Jun	---
VIVA	---	---	May	---	---	Jun	---	Jun	Jul
ZYVE	---	12 Mar	---	---	8 Jun	12 Jun	Jun	15 Jun	Jun

TABLE V. (continued)

Exclosure		Growth Initiation			Full Bloom			Seed Dissemination		
	Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Demer										
	AGSM	---	5 Mar	5 Mar	20 Jun	25 Jun	5 Jul	1 Nov	15 Aug	20 Aug
	AGSP	---	5 Mar	1 Mar	10 Jun	25 Jun	1 Jul	1 Aug	30 Jul	5 Aug
	ALTE	---	---	Apr	---	---	10 Jun	---	---	10 Jul
	ARTR	---	20 May	22 Apr	10 Sep	20 Sep	10 Sep	15 Nov	15 Nov	10 Nov
	BOGR	---	30 Mar	25 Apr	5 Aug	5 Jul	15 Jul	10 Aug	30 Jul	5 Aug
	BRTE	---	---	Mar	---	10 Jun	12 Jun	24 Jun	5 Jul	10 Jul
	CHEN	---	---	Apr	---	---	---	---	---	1 Oct
	CIR	---	---	Apr	---	---	---	---	---	---
	CYMO	---	---	Mar	---	---	1 Jun	---	---	20 Jun
	DEGE	---	25 Mar	5 May	30 Jul	10 Jun	20 Jun	1 Aug	10 Jul	20 Jul
	ERPU	---	Mar	---	---	---	---	---	---	---
	LARE	---	---	May	---	5 Jun	15 Jun	Jul	15 Jul	20 Jul
	LEDE	---	---	May	---	---	---	---	---	20 Jul
	LUPU	---	---	20 May	---	---	25 Jun	---	---	20 Jul
	OPPO	---	28 Mar	---	---	25 Jun	---	Aug	10 Aug	---
	ORHY	---	---	5 Mar	5 Jun	---	10 Jun	20 Jul	---	20 Jul
	PLSP	---	---	Mar	---	5 Jun	15 Jun	10 Jul	15 Jul	29 Jul
	POSE	---	1 Mar	1 Mar	1 Jun	10 Jun	15 Jun	1 Jul	1 Jul	1 Jul
	SAKA	Jun	---	---	---	---	---	Jul	---	---
	SIHY	---	5 Mar	1 Mar	---	25 Jun	15 Jun	2 Aug	25 Jul	30 Jul
	SILI	---	---	Apr	---	---	May	---	---	20 Jul
	SPCO	---	25 Apr	30 Apr	5 Jul	20 Jun	1 Jul	30 Jul	15 Jul	25 Jul
	STCO	---	5 Mar	5 Mar	5 Jun	25 Jun	25 Jun	25 Jul	20 Jul	20 Jul
	VUOC	---	---	May	---	10 Jun	12 Jun	---	20 Jun	Jul
Farson										
	AGSM	---	30 Mar	26 Apr	20 Jul	15 Jul	---	15 Oct	21 Sep	15 Oct
	ALTE	---	---	---	---	---	25 Jun	---	---	Jul
	ARHO$_2$	---	---	May	---	---	---	---	---	---
	ARTR	---	20 May	10 May	10 Sep	21 Sep	10 Sep	15 Nov	15 Nov	15 Nov
	ASPU	---	15 Mar	30 Apr	Jun	23 May	10 Jun	Jun	30 Jun	20 Jun
	ASSP	---	15 Mar	30 Apr	---	27 Apr	---	---	15 Jun	---
	ATCO	---	27 Apr	26 Apr	20 Jul	10 Aug	20 Jun	15 Oct	25 Oct	Oct
	CAEL	---	15 Apr	20 May	---	25 May	---	---	10 Jul	---
	CHER	---	Apr	---	15 Aug	---	---	---	15 Jul	---
	CHVI	May	Apr	15 May	15 Aug	24 Aug	10 Aug	15 Oct	25 Sep	Sep
	CYMO	---	---	May	---	---	Jun	---	---	Jul
	EROV	---	Apr	10 May	5 Jul	10 Jun	15 Jun	25 Jul	10 Jul	Jul
	EULA	---	27 Apr	30 Apr	10 Aug	10 Sep	30 Jul	20 Oct	25 Oct	Oct
	GACO	---	---	Apr	---	---	---	---	---	---
	GRSP	---	Apr	15 May	---	---	5 Jun	---	10 Nov	1 Aug
	HAAL	---	Apr	10 May	---	---	20 Jun	---	20 Jun	Jul
	KOCR	---	---	15 May	---	---	---	---	---	---
	LEPU	---	---	May	---	---	---	---	---	Aug
	OPPO	May	27 Apr	10 May	25 Jul	10 Jul	Jul	Sep	24 Aug	15 Aug
	ORHY	---	15 Apr	5 May	Jun	25 Jun	5 Jul	15 Oct	15 Jul	30 Jul
	PECL	---	---	30 Apr	---	6 Jun	15 Jun	---	Jul	Jul
	PHHO	May	30 Mar	5 May	---	5 Jun	10 Jun	27 Jun	5 Jul	Jul
	POSE	---	15 Apr	5 May	Jun	6 Jun	20 Jun	20 Jul	20 Jul	20 Jul
	SIHY	---	30 Mar	30 Apr	27 Jun	25 Jun	5 Jul	10 Aug	15 Jul	5 Aug
	SILI	May	Apr	May	---	5 Jun	5 Jun	10 Jul	Jul	5 Jul
	SPCO	---	10 May	5 May	---	10 Jun	5 Jul	---	10 Aug	30 Jul
	STCO	---	15 Apr	5 May	10 Jul	30 Jun	10 Jul	10 Aug	15 Jul	30 Jul

TABLE V. (continued)

Exclosure	Growth Initiation			Full Bloom			Seed Dissemination		
Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Horse Creek									
AGSM	---	5 Mar	Apr	25 Jun	5 Jul	10 Jul	10 Nov	20 Aug	20 Aug
AGSP	---	5 Mar	Apr	20 Jun	30 Jun	5 Jul	30 Jul	10 Jul	15 Jul
ALTE	---	---	---	---	---	9 Jun	---	---	10 Jul
ARLO	---	15 Apr	Apr	20 Jun	10 Jul	15 Jul	1 Aug	15 Jul	20 Jul
ARNO	---	15 May	15 May	20 Sep	20 Sep	15 Sep	5 Nov	5 Nov	5 Nov
ARTR	---	20 May	20 May	10 Sep	20 Sep	20 Sep	20 Nov	10 Nov	5 Nov
ASPU	---	Apr	Apr	---	20 May	25 May	25 Jun	15 Jun	20 Jun
BRCO	---	---	Apr	---	25 Jun	Jun	2 Aug	25 Jul	20 Jul
BRTE	---	---	Apr	---	15 Jun	30 Jun	25 Jul	5 Jul	10 Jul
CANU	---	30 Mar	Apr	20 Jun	15 Jun	5 Jul	15 Jul	15 Jul	20 Jul
CAS	---	20 Mar	Apr	---	5 Jun	10 Jun	20 Jul	25 Jul	15 Jul
CHER	---	---	---	---	---	5 Jul	---	---	25 Jul
COPA	---	---	May	---	---	30 Jun	---	---	Jul
CRE	---	---	May	---	25 May	25 Jun	---	Jun	Jul
CRP	---	---	Apr	30 Jun	10 Jun	10 Jun	2 Aug	5 Jul	10 Jul
CYMO	---	---	Apr	---	---	5 Jun	---	---	20 Jun
DEPI	---	---	---	30 Jun	---	5 Jun	Jul	---	10 Jul
ERPU	---	Apr	Apr	25 Jun	20 Jun	25 Jun	20 Jul	10 Jul	10 Jul
EULA	---	25 Apr	10 May	25 Jul	20 Jul	20 Jul	20 Sep	20 Sep	20 Sep
GACO	---	---	May	---	5 Jun	30 Jun	30 Jun	5 Aug	25 Jul
LARE	---	---	---	26 Jun	---	20 Jun	23 Jul	---	25 Jul
LERE	---	---	---	---	---	30 Jun	---	---	25 Jul
MACA	---	30 Mar	---	25 Jun	20 Jun	---	25 Jul	25 Jul	---
MAGR	---	---	Jun	---	20 Jun	Jul	---	Jul	---
OPPO	---	---	May	5 Jun	20 Jun	9 Jun	---	20 Aug	10 Sep
ORHY	---	5 Mar	Apr	---	5 Jun	1 Jul	5 Aug	15 Jul	25 Jul
PEN	---	---	Apr	---	---	15 Jul	---	---	30 Jul
PHHO	---	---	Apr	---	30 May	5 Jun	26 Jun	15 Jun	5 Jul
POSE	---	20 Feb	10 Mar	---	20 Jun	25 Jun	15 Jul	5 Jul	5 Jul
SAKA	26 Jun	20 Jun	15 Jun	---	25 Aug	5 Aug	---	Sep	---
SIHY	---	5 Mar	Apr	20 Jun	1 Jul	5 Jul	5 Aug	10 Jul	15 Jul
SPCO	---	---	---	---	5 Jul	5 Jul	1 Aug	25 Jul	25 Jul
STCO	---	10 Mar	Apr	20 Jun	1 Jul	1 Jul	5 Aug	15 Jul	15 Jul
TRDU	---	20 May	15 May	---	15 Jun	30 Jun	---	15 Jul	15 Jul
VIO	---	5 Mar	---	---	20 Jun	25 Jun	25 Jun	10 Jul	10 Jul
ZYVE	---	20 Apr	Apr	---	30 May	30 May	10 Jul	10 Jul	10 Jul
Mesa Antelope									
AGSM	---	30 Mar	Mar	Jul	Jul	Jul	Sep	Aug	10 Aug
ANRO	---	---	Jun	---	---	---	---	---	---
$ARHO_2$	---	---	---	Jun	---	15 Jun	Jul	---	Jul
ARTR	May	23 May	May	10 Sep	20 Sep	10 Sep	14 Oct	5 Nov	5 Nov
ASPU	---	---	---	---	---	15 Jun	---	---	Jul
ASSP	---	---	---	---	---	15 Jun	---	---	Jul
ATNU	---	---	---	1 Aug	---	---	---	---	---
CAEL	---	May	May	Jun	Jun	Jun	Jul	Jul	Jul
CHVI	May	23 May	May	10 Sep	Sep	1 Sep	14 Oct	Oct	Oct
ERCA	---	Mar	---	---	25 May	15 Jun	10 Aug	20 Jun	Jul
EROV	---	Mar	---	Jun	30 May	20 Jun	25 Jul	Jul	Jul
EULA	May	20 May	May	1 Aug	Aug	Jul	Oct	Oct	25 Oct
HAAC	---	---	---	---	---	15 Jun	Jul	---	Jul
LEPU	---	May	May	Jun	15 Jun	30 Jun	Jul	Jul	10 Aug
MACA	May	---	---	15 Aug	1 Jun	20 Jun	---	Oct	1 Oct

TABLE V. (continued)

Exclosure	Growth Initiation			Full Bloom			Seed Dissemination		
Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Mesa Antelope (cont'd)									
OPPO	---	May	---	1 Aug	Jul	Jul	Sep	Sep	Aug
ORHY	---	30 Mar	---	10 Jul	30 Jun	5 Jul	10 Aug	---	1 Aug
PELA	---	---	---	17 Jul	Jul	---	---	---	---
PHHO	---	30 Mar	---	---	23 May	15 Jun	20 Jul	20 Jun	30 Jul
POSE	---	Mar	---	20 Jun	10 Jun	30 Jun	1 Aug	---	Jul
SIHY	---	Mar	---	Jul	Jul	Jul	5 Aug	---	4 Aug
SILI	---	---	---	30 Jun	---	Jun	10 Jul	---	---
STCO	---	30 Mar	---	10 Jul	Jul	Jul	15 Aug	---	Jul
TRI	---	---	---	---	---	5 Jun	15 Jul	---	20 Jun
Owl Draw									
AGSM	---	---	Apr	16 Jul	5 Jul	17 Jul	---	5 Aug	25 Jul
AGSP	---	---	Apr	5 Jul	5 Jul	14 Jul	3 Aug	25 Jul	28 Jul
ARHO	---	---	May	---	1 Jun	15 Jul	---	20 Jun	30 Jul
ARHO$_2$	---	---	---	---	---	Jun	---	Jul	25 Jul
ARNO	---	30 May	May	---	20 Sep	20 Sep	---	---	---
ARTR	---	30 May	May	---	20 Sep	20 Sep	---	---	---
ASPU	---	---	Apr	---	May	25 May	---	Jul	20 Jul
AST$_1$	---	---	Apr	---	Jun	10 Jun	---	Jul	30 Jul
AST$_2$	---	---	Apr	---	Jun	10 Jun	---	Jul	10 Jul
AST$_3$	---	---	Apr	---	Jun	10 Jun	---	Jul	10 Jul
BASA	---	5 Jun	1 Jun	---	Jun	Jun	---	Jul	Jul
CAMI	---	---	---	---	---	---	---	Jul	14 Jul
CANU	---	May	May	16 Jul	5 Jul	14 Jul	---	10 Aug	Aug
CAS	---	---	---	---	---	6 Jun	---	Jul	28 Jul
CHVI	---	May	May	Aug	Aug	Aug	---	Sep	25 Sep
CRBR	---	---	---	---	Jun	Jun	---	Jul	Jul
CRE	---	May	May	---	Jun	Jun	---	Jul	14 Jul
CYMO	---	---	---	---	Jun	5 Jun	---	Jun	1 Jul
DEPI	---	Jun	---	Jul	Jun	---	---	Jul	---
ERPU	---	---	---	---	---	10 Jun	---	---	20 Jul
EULA	---	---	May	---	Jun	5 Jul	---	Sep	20 Sep
HAAC	---	May	May	---	10 Jun	15 Jun	Jul	10 Jul	5 Jul
JUOS	---	May	May	---	Jul	5 Jul	---	Aug	Aug
JUSC	---	May	May	---	Jul	5 Jul	---	Aug	Aug
KOCR	---	---	Apr	Jul	5 Jun	Jun	1 Aug	15 Jun	20 Jul
LERE	---	---	---	20 Jul	20 Jun	5 Jul	Aug	10 Jul	20 Jul
LILE	---	May	May	---	Jun	25 Jun	---	Jul	25 Jul
MAVI	---	---	---	---	Jul	1 Jul	---	Jul	Jul
MAGR	---	May	May	---	15 Jun	10 Jun	20 Jul	Jul	Jul
OPPO	---	---	May	---	Jun	Jun	---	Aug	Aug
ORHY	---	---	Apr	---	25 Jun	Jun	---	10 Jul	25 Jul
PEN	---	---	May	---	Jun	30 Jun	---	Jul	20 Jul
PHHO	---	---	May	---	1 Jun	1 Jun	---	25 Jun	10 Jul
POFE	---	---	Apr	---	15 Jun	10 Jun	20 Jul	10 Jul	Jul
POSE	---	---	Apr	---	17 Jun	10 Jun	20 Jul	10 Jul	Jul
SED	---	---	---	---	---	30 Jun	---	Jul	25 Jul
SEN	---	---	May	10 Jul	10 Jun	15 Jun	---	---	---
STCO	---	---	Apr	---	25 Jun	25 Jun	---	10 Jul	15 Jul
TRDU	---	---	---	---	---	Jun	---	---	5 Jul
TRI	---	---	---	---	---	Jun	---	---	1 Jul
VIAM	---	---	May	---	10 Jun	15 Jun	10 Jul	15 Jun	5 Jul

TABLE V. (continued)

Exclosure		Growth Initiation			Full Bloom			Seed Dissemination		
	Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Red Wash #2										
	AGSM	---	30 Mar	Mar	Jul	Jul	Jul	Aug	5 Aug	Aug
	AGSP	---	28 Mar	Mar	Jul	Jul	Jul	Aug	30 Jul	Aug
	ALTE	---	May	---	---	5 Jun	15 Jun	Jul	Jul	25 Jul
	ARCO	---	---	---	---	---	25 Jun	---	---	---
	ARHO	---	30 Mar	---	30 Jun	5 Jun	5 Jul	Jul	20 Jun	Aug
	ARNO	---	May	---	---	Aug	---	---	Oct	---
	ARTR	---	May	May	---	Aug	Aug	---	Oct	Oct
	ASDI	---	---	May	---	1 Jun	Jul	---	Aug	Jul
	ASMO	Jun	May	---	---	1 Jun	---	---	Aug	---
	ASPU	---	May	May	20 Jun	7 Jun	1 Jun	Jul	20 Jun	Jul
	CHDO	---	30 Mar	May	30 Jul	7 Jun	Jul	---	1 Aug	---
	CHNA	---	1 Jun	Jun	Aug	Aug	---	---	---	---
	CHVI	---	May	Jun	Aug	Aug	Aug	---	---	---
	CRFL	---	May	May	30 Jun	20 Jun	26 Jun	---	5 Aug	Jul
	DEPI	---	May	---	---	Jun	---	---	Jul	---
	ERAS	---	May	May	20 Jun	5 Jun	13 Jun	---	30 Jul	Jul
	ERMI	---	May	---	---	5 Jul	---	---	Aug	---
	EROV	---	May	May	25 Jun	30 Jun	30 Jun	5 Aug	Jul	Jul
	EULA	---	May	May	---	5 Aug	Aug	---	---	---
	GIAG	---	---	---	25 Jun	15 Jun	---	---	15 Aug	---
	GRSP	---	May	May	Jun	5 Aug	10 Jul	Jul	---	30 Jul
	HAAC	---	Mar	---	25 Jun	5 Jun	20 Jun	---	Jul	Jul
	LEPU	---	---	---	28 Jun	15 Jun	30 Jun	Jul	5 Aug	25 Jul
	MACA	---	---	---	---	10 Aug	---	---	Aug	---
	OPPO	---	---	---	---	Jul	Jul	---	25 Jul	Aug
	ORFA	---	May	---	---	10 Jun	---	---	30 Jun	---
	ORHY	---	11 Mar	Mar	10 Jul	5 Jul	5 Jul	5 Aug	30 Jul	25 Jul
	PEN	---	Mar	---	30 Jun	15 Jun	30 Jun	Aug	Aug	Aug
	PHHO	---	Mar	---	---	1 Jun	5 Jun	Jun	20 Jun	25 Jun
	POSE	---	11 Mar	Mar	Jun	25 Jun	Jun	Jul	Aug	Jul
	SIHY	---	30 Mar	Mar	---	Jul	Jul	---	30 Jul	30 Jul
	SILI	---	---	---	20 Jun	1 Jun	20 Jun	Jul	15 Jun	Jul
	STCO	---	Mar	20 Mar	Jul	Jul	Jul	Aug	Jul	Jul
	TECA	---	May	May	Aug	Jul	5 Aug	Aug	Aug	Aug
Shoshoni: Ant #7										
	AGSM	---	28 Mar	5 Apr	5 Jul	15 Jul	18 Jul	Oct	30 Oct	30 Oct
	ALTE	---	---	May	Jun	Jun	15 Jun	30 Jun	15 Jun	30 Jun
	ARTR	---	22 May	May	15 Sep	10 Oct	10 Oct	9 Nov	9 Nov	1 Nov
	ASPU	---	5 Mar	Mar	Jun	5 Jun	20 May	15 Jul	15 Jun	10 Jul
	BOGR	---	15 Apr	15 Apr	7 Aug	20 Jul	20 Jul	9 Nov	10 Nov	Nov
	BRTE	---	5 Mar	Apr	---	10 Jun	30 Jun	5 Jul	10 Jul	10 Jul
	CYMO	---	---	---	---	---	30 May	---	---	20 Jun
	DEPI	---	---	---	---	---	---	---	---	10 Jul
	ERPU	---	21 Feb	Mar	27 Jun	30 May	30 Jun	15 Jul	15 Jun	20 Jul
	EULA	---	---	---	30 Jul	---	---	Sep	---	---
	LARE	---	---	---	---	---	---	Jul	---	---
	LEDE	---	---	---	---	---	---	5 Jul	---	20 Jul
	LUPU	---	---	---	---	---	25 Jun	---	---	25 Jul
	MACA	---	---	---	---	---	25 Jun	---	---	Jul
	OPPO	---	20 Apr	Apr	5 Jul	20 Jun	5 Jul	15 Aug	---	Aug
	ORHY	---	5 Mar	5 Apr	Jun	10 Jun	30 Jun	5 Aug	15 Jul	15 Jul
	PHHO	---	5 Mar	10 Apr	---	10 May	30 May	25 Jun	5 Jul	5 Jul

TABLE V. (continued)

Exclosure		Growth Initiation			Full Bloom			Seed Dissemination		
	Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Shoshoni: Ant #7 (cont'd)	PLPA	---	5 Mar	Apr	1 Jul	5 Jun	25 Jun	1 Aug	15 Jul	25 Jul
	BRTE	---	5 Mar	Apr	---	10 Jun	30 Jun	5 Jul	10 Jul	10 Jul
	POSE	---	21 Feb	30 May	Jun	10 Jun	10 Jun	30 Jun	5 Jul	30 Jun
	SIHY	---	25 Mar	25 Mar	Jun	25 Jun	30 Jun	5 Aug	15 Jul	5 Aug
	SILI	---	---	---	---	---	30 May	---	---	5 Jul
	SPCO	---	25 Apr	Apr	5 Jul	20 Jun	30 Jun	1 Aug	15 Jul	25 Jul
	STCO	---	5 Mar	Mar	Jun	5 Jul	5 Jul	5 Aug	15 Jul	20 Jul
Sweetwater										
	ARFR	---	28 Mar	5 Apr	5 Sep	Aug	Aug	Nov	Oct	Oct
	AGSM	---	28 Mar	Apr	12 Jul	10 Jul	5 Jul	15 Sep	15 Sep	30 Jul
	ALTE	---	---	---	---	---	15 Jun	---	---	25 Jul
	ARHO	---	---	---	---	20 Jun	20 Jun	---	25 Jul	---
	$ARHO_2$	---	20 Apr	---	---	25 May	30 May	---	30 Jun	---
	ARNO	---	22 May	20 May	15 Sep	20 Sep	20 Sep	5 Nov	25 Oct	25 Oct
	ARTR	---	22 May	20 May	15 Sep	15 Sep	20 Sep	10 Nov	30 Oct	25 Oct
	ASDI	---	1 Jun	---	---	20 Jul	Jul	---	Aug	Aug
	ASPU	---	20 Mar	5 Apr	1 Jul	5 Jun	15 Jun	12 Jul	10 Jun	Jun
	ASSP	---	25 Mar	5 Apr	1 Jul	19 Jun	30 Jun	Aug	25 Jul	25 Jul
	CAFI	---	28 Mar	Apr	---	30 May	15 Jun	20 Aug	5 Jul	5 Jul
	CANU	---	15 May	10 May	20 Jun	19 Jun	Jun	5 Jul	5 Jul	---
	CHDO	---	1 Jun	---	---	20 Jun	20 Jun	---	10 Jul	25 Jul
	CHNA	---	25 Apr	30 Apr	Sep	Sep	Sep	Oct	Oct	Oct
	CHVI	May	20 Apr	May	10 Sep	10 Aug	Aug	30 Oct	---	Oct
	COPA	---	---	---	29 Jun	5 Jun	20 Jun	Jul	20 Jul	20 Jul
	CRP	---	25 Mar	1 Mar	29 Jun	22 May	30 Jun	10 Aug	Aug	25 Jul
	CYMO	---	---	May	---	---	5 Jun	---	---	20 Jun
	DEGE	---	25 Mar	5 Apr	20 Jun	25 Jun	15 Jun	12 Jul	30 Jun	15 Jul
	ERLA	---	---	May	---	---	15 Jun	---	---	---
	EROV	---	20 Apr	May	20 Jun	25 May	15 Jun	5 Jul	10 Jul	10 Jul
	ERPU	---	25 Mar	5 Apr	29 Jun	15 Jun	Jun	5 Jul	5 Jul	10 Jul
	KOCR	---	28 Mar	Apr	25 Jun	20 Jun	20 Jun	25 Aug	15 Jul	15 Jul
	LEAL	---	---	---	---	1 Jun	25 Jun	---	29 Jul	25 Jul
	LEPU	---	20 May	May	30 Jun	19 Jun	30 Jun	Jul	1 Aug	20 Jul
	MAGR	---	---	---	---	---	Jul	---	---	Aug
	OECA	---	---	---	---	---	20 Jun	---	---	Jul
	OPPO	---	25 Apr	May	15 Jul	5 Jul	10 Jul	Sep	Aug	---
	ORFA	---	---	---	---	20 Jun	Jul	---	15 Jul	---
	ORHY	---	28 Mar	Apr	20 Jun	20 Jun	30 Jun	5 Sep	10 Jul	10 Jul
	OXLA	---	20 Mar	30 Mar	---	10 Jun	25 Jun	Aug	Aug	25 Jul
	PECL	---	May	---	30 Jun	20 Jun	25 Jun	20 Jul	10 Jul	5 Aug
	PHHO	---	---	---	30 Jun	22 May	30 May	12 Jul	5 Jul	Jul
	POSE	---	25 Mar	Apr	15 Jun	20 Jun	---	5 Jul	5 Jul	---
	PSTE	---	20 May	---	---	---	---	---	Aug	---
	SPCO	---	28 Mar	5 Apr	---	25 Jun	30 Jun	Aug	5 Jul	---
	STCO	---	28 Mar	Apr	25 Jun	25 Jun	30 Jun	5 Sep	10 Jul	10 Jul
	TECA	---	28 Mar	5 Apr	1 Aug	1 Aug	1 Aug	Oct	15 Oct	15 Oct
	TOIN	---	---	May	---	10 Jun	15 Jun	---	10 Jul	Aug
	VIVA	---	5 May	---	---	25 May	1 Jun	---	15 Jun	---
	ZYVE	---	28 Mar	5 Apr	---	30 May	5 Jun	---	5 Jul	30 Jun

TABLE V. (continued)

Exclosure		Growth Initiation			Full Bloom			Seed Dissemination		
	Species	1973	1974	1975	1973	1974	1975	1973	1974	1975
Upper Gov't Draw										
	AGSM	--	Mar	Mar	10 Jul	Jul	10 Jul	Aug	25 Aug	Aug
	ALTE	---	---	---	Jun	Jun	20 Jun	Jun	1 Jun	Jul
	ARLI	---	---	May	---	---	30 May	---	---	Jun
	ARTR	---	May	May	Aug	22 Aug	Aug	Nov	Nov	Nov
	ASPU	---	---	May	---	---	May	---	---	Jun
	BRTE	---	---	Jun	---	---	30 Jun	---	---	25 Jul
	CAS	---	---	---	5 Jul	10 Jun	5 Jun	25 Jul	Jul	25 Jul
	CHVI	---	May	May	15 Aug	22 Aug	Aug	---	Sep	Sep
	CRE	---	---	---	---	10 Jun	10 Jun	20 Jul	15 Jun	20 Jul
	CYMO	---	---	May	---	---	Jun	---	---	24 Jun
	DEPI	---	---	May	---	---	15 Jun	---	---	20 Jul
	ERI	---	---	---	---	---	---	Jul	19 Jun	---
	ERPU	---	---	Jun	---	---	25 Jun	---	---	25 Jul
	EULA	---	---	May	10 Jul	---	---	Aug	---	---
	KOCR	---	Mar	Mar	Jul	20 Jun	30 Jun	25 Jul	Jul	30 Jul
	LARE	---	---	Jun	---	---	24 Jun	---	---	Jul
	LEDE	---	---	Jun	---	---	Jun	---	---	1 Aug
	LERE	---	---	Jun	---	---	25 Jun	---	---	Jul
	MAGL	---	---	May	---	---	30 Jun	---	---	25 Jul
	OPPO	---	May	May	5 Jul	Jul	Jul	30 Aug	Aug	Aug
	PEER	---	---	Jun	---	20 Jun	24 Jun	---	Jul	Aug
	PHHO	---	---	Apr	Jun	5 Jun	1 Jun	Jul	Jul	Jul
	PLSP	---	---	Jun	---	---	Jul	---	---	30 Jul
	POSE	---	Mar	Mar	---	10 Jun	30 Jun	Jul	Jul	Jul
	SIHY	---	Mar	---	---	Jul	---	25 Jul	20 Aug	---
	SPCO	---	May	May	30 Jun	15 Jun	Jun	Aug	20 Aug	5 Aug
	UMB	---	---	---	---	---	May	17 Jul	---	Jun
	VIAM	---	---	Jun	---	---	25 Jun	Jul	Jul	Jul
	VIO	---	---	May	---	---	Jun	---	---	Jul

TABLE VI . Independent and dependent variables used in step-wise multiple regression analysis.

Variable No.	
1	Soil temperature at 38 cm depth on pheno. sampling date (°C)
2	Soil moisture % at 0-15 cm depth on pheno. sampling date
3	Soil moisture % at 15-30 cm depth on pheno. sampling date
4	Soil moisture % at 46-61 cm depth on pheno. sampling date
5	Soil moisture % at 0-15 cm depth one month previous
6	Soil moisture % at 15-30 cm depth one month previous
7	Soil moisture % at 46-61 cm depth one month previous
8	Yearly precipitation total accumulation (mm)
9	Oct. 15 - April 15 precipitation accumulation (mm)
10	April 15 - July 1 precipitation accumulation (mm)
11	July 1 - Sept. 1 precipitation accumulation (mm)
12	Sept. 1 - Oct. 15 precipitation accumulation (mm)
13	Total forage production (kg./Ha./yr.)
14	Species forage production (kg./Ha./yr.)
15	Air temperature on pheno. sampling date (°C)
16	Maximum air temperature since last sampling date (°C)
17	Minimum air temperature since last sampling date (°C)
18	Species phenophase score (1 - 17)

TABLE VII. Simple correlation matrix for Agropyron smithii of all independent and dependent variables used in the study.

VARIABLE NUMBER	1	2	3	4	5	6	7	8	9	10
1	1.0000	-.6515**	-.2824**	.0301	-.3948**	.0025	.1143	-.1712*	-.0863	-.2198**
2		1.0000	.6299**	.2082**	.4849**	.2145**	-.0078	.2365**	.3853**	.1968**
3			1.0000	.4164**	.5806**	.6216**	.1531*	.1881**	.3691**	.1450*
4				1.0000	.2519**	.3554**	.3586**	.3881**	.2785**	.2963**
5					1.0000	.6504**	.2134**	.2684**	.3226**	.2327**
6						1.0000	.4284**	.0476	.1765*	-.0148
7							1.0000	.2632**	.2049**	.1489*
8								1.0000	.4841**	.9359**
9									1.0000	.3249**
10										1.0000

VARIABLE NUMBER	11	12	13	14	15	16	17	18
1	-.0089	.0876	-.1227	-.0054	.8185**	.7995**	.8501**	.3765**
2	-.2018**	.0452	.4520**	.2587**	-.5662**	-.5690**	-.4758**	-.2562**
3	-.2497**	.1198	.5290**	.2956**	-.2651**	-.4461**	-.2032**	-.3226**
4	.3086**	-.0767	.2921**	.2256**	-.0000	-.0930	.0656	-.1343
5	-.2042**	.1350	.4367**	.2557**	-.3600**	-.4280**	-.2659**	-.5383**
6	-.2084**	.2200**	.2781**	.2137**	-.0370	-.1911**	.1003	-.2537**
7	.3153**	-.0449	.1925**	.1943**	.0073	-.0689	.2004**	-.0778
8	.5468**	-.2085**	.3925**	.1959**	-.1770*	-.1227	-.1830**	-.1859**
9	.0072	-.3950**	.7422**	.7611**	-.1332	-.2014**	.0164	-.0511
10	.4582**	-.3077**	.2433**	.0799	-.1645*	-.1342	-.2807**	-.2150**
11	1.0000	-.4048**	-.2614**	-.2114**	-.0413	.1503*	-.0894	-.0333
12		1.0000	.1398*	-.1683*	.0135	-.0446	.1839**	.0196
13			1.0000	.6084**	-.1529*	-.2946**	.0069	-.0890
14				1.0000	-.0884	-.3156**	.2036**	.0311
15					1.0000	.7903**	.7345**	.2679**
16						1.0000	.6295**	.3605**
17							1.0000	.3029**
18								1.0000

TABLE VII. Simple correlation matrix for Agropyron spicatum of all independent and dependent variables used in the study.

VARIABLE NUMBER	1	2	3	4	5	6	7	8	9	10
1	1.0000	-.8295**	-.5424**	-.0785	-.4735**	-.0895	.2444	-.3018 *	-.1602	-.2645*
2		1.0000	.7294**	.2541 *	.4016**	.1172	-.1051	.4370 **	.3535 **	.3183*
3			1.0000	.5516 **	.4616**	.3811**	.1946	.6268 **	.6381 **	.4876**
4				1.0000	.2726*	.4630**	.3171*	.4301 **	.3924 **	.4154**
5					1.0000	.6832**	.3132*	.4735 **	.2956*	.3915**
6						1.0000	.6108**	.2985 *	.3156*	.2231
7							1.0000	.2810 *	.3540 **	.1983
8								1.0000	.5918**	.8924**
9									1.0000	.2971*
10										1.0000

VARIABLE NUMBER	11	12	13	14	15	16	17	18
1	.1794	-.1012	-.2345	-.0982	.7377 **	.8388**	.8807**	.3493 **
2	-.4349**	.1677	.4371**	.1635	-.6255**	-.7303**	-.7585**	-.2167
3	-.5561**	-.0832	.4155**	.5215 **	-.5167**	-.7211**	-.4198**	-.3524 **
4	-.2251	-.1830	.1470	.4446 **	-.2207	-.3064*	.0512	-.3202 *
5	-.3924**	.2500*	.4711**	.1144	-.6205**	-.5016**	-.4867**	-.8025 **
6	-.2360	-.0895	.1401	.2963 *	-.2867*	-.2852*	-.0748	-.5821 **
7	-.2328	-.1822	.0847	.3619 **	.0319	-.0638	.2853*	-.3151 *
8	-.6021**	.2366	.7356**	.4196 **	-.2191	-.4965**	-.2613*	-.3319 **
9	-.8346**	-.3754**	.3577**	.8303 **	-.3109 *	-.5214**	-.0087	-.2561 *
10	-.2512*	.2669*	.5798**	.2908 *	-.1382	-.4086**	-.2396	-.2755 *
11	1.0000	-.1493	-.7362**	-.3872 **	.2643 *	.3668**	.1571	.2764 *
12		1.0000	.7247**	-.7584 **	.0818	.1926	-.3261**	-.0917
13			1.0000	-.1195	-.1418	-.2187	-.3402**	-.2842 *
14				1.0000	-.2556 *	-.5151**	.1315	-.1598
15					1.0000	.7173**	.5366**	.5787 **
16						1.0000	.6318**	.4287 **
17							1.0000	.2283
18								1.0000

TABLE VII. Simple correlation matrix for Artemisia nova of all independent and dependent variables used in the study.

VARIABLE NUMBER	1	2	3	4	5	6	7	8	9	10
1	1.0000	-.5832**	-.3041**	.0357	-.1675	.0639	.1696	-.3448**	-.1326	-.3371**
2		1.0000	.7804**	.0967	.4928**	.2656*	-.1058	.1634	.5795**	.0843
3			1.0000	.2621*	.5764**	.3879**	-.0184	.1303	.6423**	.0382
4				1.0000	.0607	.0838	.0852	.3158**	.2388*	.2897**
5					1.0000	.8129**	.0801	.1018	.5259**	.0300
6						1.0000	.2360*	.0388	.4041**	-.0169
7							1.0000	.2750**	.1017	.2685*
8								1.0000	.3530**	.9895**
9									1.0000	.2155
10										1.0000

VARIABLE NUMBER	11	12	13	14	15	16	17	18
1	-.2267*	.1688	-.1753	-.1205	.8532**	.7228**	.8111**	.0899
2	-.3609**	.4189**	.1477	-.4529**	-.5454**	-.5579**	-.2919**	.0171
3	-.4208**	.3995**	.2698 *	-.4285**	-.3400**	-.3750**	-.1412	-.0148
4	.1233	-.1202	.2696 *	.0750	.0999	.0111	-.0072	.0033
5	-.3929**	.4869**	.0330	-.5129**	-.3978**	-.3581**	.0012	-.3297**
6	-.3513**	.4427**	-.0341	-.4582**	-.1189	-.0932	.1869	-.2734*
7	.1960	-.1797	.1885	.1421	.1413	.0318	.0182	-.1016
8	.5999**	-.2121	.1375	.0671	-.3935**	-.2834**	-.4202**	-.3300**
9	-.5110**	.5178**	.4592**	-.5832**	-.2877**	-.4798**	.0144	-.1364
10	.7005**	-.2874**	.0575	.1457	-.3646**	-.2201*	-.4355**	-.3224**
11	1.0000	-.7715**	-.0718	.6991**	-.1360	.1181	-.4471**	-.1945
12		1.0000	-.4119**	-.9892**	.0644	-.1059	.4162**	.1027
13			1.0000	.3976**	-.2213*	-.3259**	-.2403*	-.1097
14				1.0000	-.0065	.1514	-.3620**	-.0553
15					1.0000	.7500**	.6997**	.2953**
16						1.0000	.7142**	.1716
17							1.0000	.1276
18								1.0000

TABLE VII. Simple correlation matrix for Artemisia tridentata of all independent and dependent variables used in the study.

VARIABLE NUMBER	1	2	3	4	5	6	7	8	9	10
1	1.0000	-.5812**	-.2081**	.0946	-.3089**	.0584	.2221**	-.2161**	-.0428	-.2612**
2		1.0000	.6237**	.2118**	.5201**	.2110**	.1114	.1173	.3738**	.0933
3			1.0000	.5039**	.5958**	.5780**	.3533**	.1247	.3745**	.0841
4				1.0000	.2603**	.4268**	.5041**	.3094*	.2795**	.2589**
5					1.0000	.6626**	.3483**	.1252	.3125**	.1000
6						1.0000	.6575**	-.0233	.1622*	-.0776
7							1.0000	.1000	.2363**	.0249
8								1.0000	.4638**	.9433**
9									1.0000	.3198**
10										1.0000

VARIABLE NUMBER	11	12	13	14	15	16	17	18
1	-.0348	.0079	-.1597*	-.2398**	.8127**	.7464**	.8223**	.0613
2	-.3213**	.0966	.1414*	.2312**	-.5461**	-.5280**	-.4189**	-.0418
3	-.2547**	.1064	.2305**	.3175**	-.2374**	-.3894**	-.1570*	-.2463**
4	.1213	-.0333	.3130**	.1252	.0569	-.0512	.1475*	-.0705
5	-.3227**	.1794*	.1121	.1156	-.3195**	-.3867**	-.1851**	-.4199**
6	-.2399**	.2222**	.0240	.0510	-.0074	-.1614*	.1298	-.1952**
7	-.0517	.0938	.1830**	-.0529	.1279	-.0687	.2931**	-.0765
8	.6088**	-.2147**	.7609**	.2707**	-.2099**	-.1502*	-.2610**	-.1519*
9	.0277	-.3962**	.5833**	.1233	-.1357	-.1962**	.0083	-.0678
10	.5246**	-.3067**	.5998**	.3600**	-.1969**	-.1584*	-.3364**	-.1565*
11	1.0000	-.4107**	.5070**	.0519	-.0591	.0868	-.1612*	-.0706
12		1.0000	-.1058	-.2248**	-.0112	-.0362	.1500*	.0394
13			1.0000	.1894**	-.2255**	-.2149**	-.1590*	-.1020
14				1.0000	-.1983**	-.1335	-.4342**	-.1593*
15					1.0000	.7855**	.7568**	-.0020
16						1.0000	.6577**	.1258
17							1.0000	.0049
18								1.0000

TABLE VIII. Significant simple correlation coefficients between various independent variables and plant species phenology.

Species	Independent Variable		Correlation Coefficient
Agropyron smithii	X_1	Soil temp. 38 cm. depth (°C)	.38**
	X_2	Soil moist. % 0-15 cm.	-.26**
	X_3	Soil moist. % 15-30 cm.	-.32**
	X_5	Soil moist. % 0-15 cm. 1 mth. previous	-.54**
	X_6	Soil moist. % 15-30 cm. 1 mth. previous	-.25**
	X_8	Yearly ppt. accumulation (mm.)	-.19**
	X_{10}	Apr. 15-Jul. 1 ppt. accumulation (mm.)	-.22**
	X_{15}	Air temp. (°C)	.27**
	X_{16}	Max. air temp. since last sampling date (°C)	.36**
	X_{17}	Min. air temp. since last sampling date (°C)	.30**
Agropyron spicatum	X_1	Soil temp. 38 cm. depth (°C)	.35**
	X_3	Soil moist. % 15-30 cm.	-.35**
	X_4	Soil moist. % 46-61 cm.	-.32*
	X_5	Soil moist. % 0-15 cm. 1 mth. previous	-.80**
	X_6	Soil moist. % 15-30 cm. 1 mth. previous	-.58**
	X_7	Soil moist. % 46-61 cm. 1 mth. previous	-.31*
	X_8	Yearly ppt. accumulation (mm.)	-.33**
	X_9	Oct. 15-Apr. 15 ppt. accumulation (mm.)	-.26*
	X_{10}	Apr. 15-Jul. 1 ppt. accumulation (mm.)	-.28*
	X_{11}	Jul. 1-Sep. 1 ppt. accumulation (mm.)	.28*
	X_{13}	Total forage prod. (kg./Ha./yr.)	-.28*
	X_{15}	Air temp. (°C)	.58**
	X_{16}	Max. air temp. since last sampling date (°C)	.43**
Artemisia nova	X_5	Soil moist. % 0-15 cm. 1 mth. previous	-.33**
	X_6	Soil moist. % 15-30 cm. 1 mth. previous	-.27*
	X_8	Yearly ppt. accumulation (mm.)	-.33**
	X_{10}	Apr. 15-Jul. 1 ppt. accumulation (mm.)	-.32**
	X_{15}	Air temp. (°C)	.30**
Artemisia tridentata	X_3	Soil moist. % 15-30 cm.	-.25**
	X_5	Soil moist. % 0-15 cm. 1 mth. previous	-.42**
	X_6	Soil moist. % 15-30 cm. 1 mth. previous	-.20**
	X_8	Yearly ppt. accumulation (mm.)	-.15*
	X_{10}	Apr. 15-Jul. 1 ppt. accumulation (mm.)	-.16*
	X_{14}	Forage production (ARTR-kg./Ha./yr.)	-.16*

*Significance at .05 level.
**Significance at .01 level.

TABLE IX. Statistical significance summary for the derived regression equation for *Agropyron smithii*.

Multiple Correlation Coefficient	(R)	.6527
Coefficient of Determination	(R^2)	.4206

Source of Variation	Degrees of Freedom	Mean Squares	F Value
Due to Regression	10	293.48	14.33***
Deviation about Regression	193	20.49	
Total	203		

$$Y_{18} = B_o + B_3X_3 + B_5X_5 + B_6X_6 + B_{11}X_{11} + B_{12}X_{12} + B_{13}X_{13} + B_{14}X_{14} + B_{15}X_{15} + B_{16}X_{16} + B_{17}X_{17}$$

Y = phenophase score

$B_o = 4.23$

Independent Variable	Regression Coefficient	Standard Error	t Ratio
X_3	$B_3 = -.179$	.104	-1.43*
X_5	$B_5 = -.628$	.079	-7.97***
X_6	$B_6 = .289$	.100	2.58***
X_{11}	$B_{11} = -.008$	.005	-1.85*
X_{12}	$B_{12} = .005$	.003	1.52*
X_{13}	$B_{13} = .004$	.003	1.13*
X_{14}	$B_{14} = .009$	.003	2.93***
X_{15}	$B_{15} = -.118$	.051	-2.32**
X_{16}	$B_{16} = .251$	.060	4.17***
X_{17}	$B_{17} = -.070$	.055	-1.28*

*Significance at $<$ .4 level.
**Significance at .05 level.
***Significance at .01 level.

TABLE IX. Statistical significance summary for the derived regression equation for Agropyron spicatum.

Multiple Correlation Coefficient	(R)	.8624
Coefficient of Determination	(R^2)	.7437

Source of Variation	Degrees of Freedom	Mean Squares	F Value
Due to Regression	4	371.58	40.63***
Deviation about Regression	56	9.15	
Total	60		

$$Y_{18} = B_o + B_1X_1 + B_2X_2 + B_5X_5 + B_{17}X_{17}$$

Y = phenophase score (1-17)

$B_o = 13.07$

Independent Variable	Regression Coefficient	Standard Error	t Ratio
X_1	$B_1 = .37$	.10	3.76***
X_2	$B_2 = .20$	.12	1.68*
X_5	$B_5 = -.96$	.09	-11.27***
X_{17}	$B_{17} = -.31$	.07	- 4.12***

*Significance at < .4 level.
**Significance at .05 level.
***Significance at .01 level.

TABLE IX. Statistical significance summary for the derived regression equation for Artemisia nova.

Multiple Correlation Coefficient (R) .5693
Coefficient of Determination (R^2) .3241

Source of Variation	Degrees of Freedom	Mean Squares	F Value
Due to Regression	4	76.65	5.91***
Deviation about Regression	79	12.96	
Total	83		

$$Y_{18} = B_o + B_1X_1 + B_2X_2 + B_5X_5 + B_8X_8 + B_{12}X_{12} + B_{15}X_{15}$$

Y = phenophase score

$B_o = 5.47$

Independent Variable	Regression Coefficient	Standard Error	t Ratio
X_1	B_1 = -.169	.110	-1.53*
X_2	B_2 = .194	.149	1.31*
X_5	B_5 = -.319	.117	-2.73***
X_8	B_8 = -.003	.001	-2.15**
X_{12}	B_{12} = .031	.024	1.29*
X_{15}	B_{15} = .174	.083	2.11**

*Significance at < .4 level.
**Significance at .05 level.
***Significance at .01 level.

TABLE IX. Statistical significance summary for the derived regression equation for *Artemisia tridentata*.

Multiple Correlation Coefficient (R) .6578
Coefficient of Determination (R^2) .4326

Source of Variation	Degrees of Freedom	Mean Squares	F Value
Due to Regression	13	128.65	11.61***
Deviation about Regression	197	11.08	
Total	210		

$$Y_{18} = B_o + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_9X_9 + B_{11}X_{11} + B_{13}X_{13} + B_{14}X_{14} + B_{15}X_{15} + B_{16}X_{16} + B_{17}X_{17}$$

Y = phenophase score

$B_o = 6.40$

Independent Variable	Regression Coefficient	Standard Error	t Ratio
X_2	B_2 = .096	.065	1.46*
X_3	B_3 = -.194	.088	-2.20**
X_4	B_4 = .149	.065	2.31**
X_5	B_5 = -.568	.060	-9.46***
X_6	B_6 = .281	.085	3.30***
X_7	B_7 = .084	.079	1.06*
X_9	B_9 = .007	.004	1.81**
X_{11}	B_{11} = -.022	.004	-5.50***
X_{13}	B_{13} = .003	.002	1.25*
X_{14}	B_{14} = -.014	.004	-4.01***
X_{15}	B_{15} = -.112	.039	-2.90***
X_{16}	B_{16} = .181	.040	4.52***
X_{17}	B_{17} = -.158	.038	-4.16***

*Significance at $<$ .4 level.
**Significance at .01 level.
***Significance at .01 level.

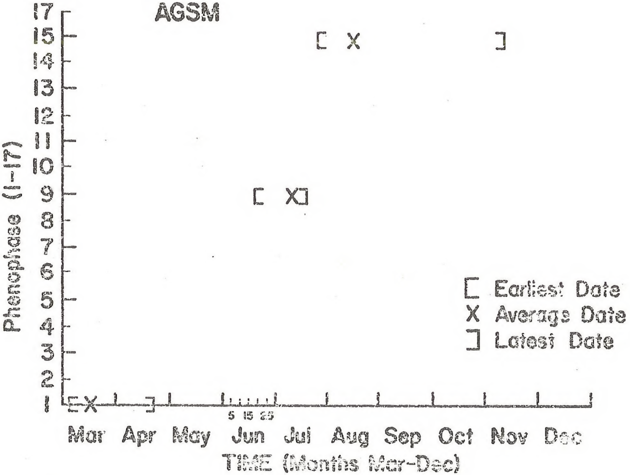


FIGURE 1. Phenological development averages for each principal species in all study areas from 1973 - 1975.

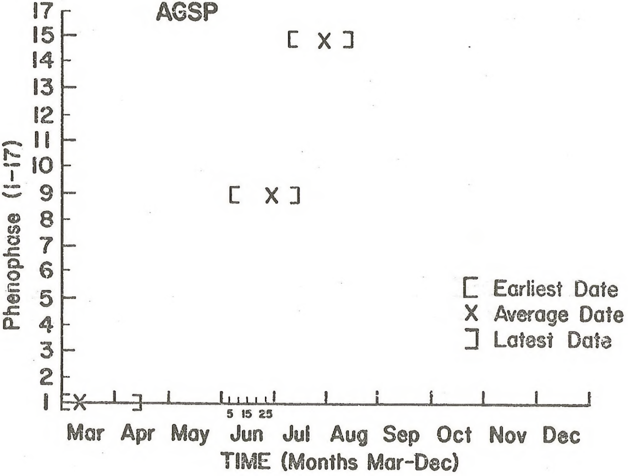


FIGURE 1. (continued)

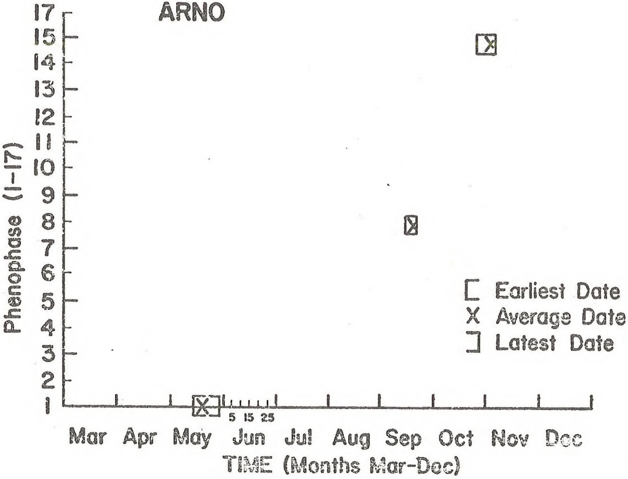


FIGURE 1. (continued)

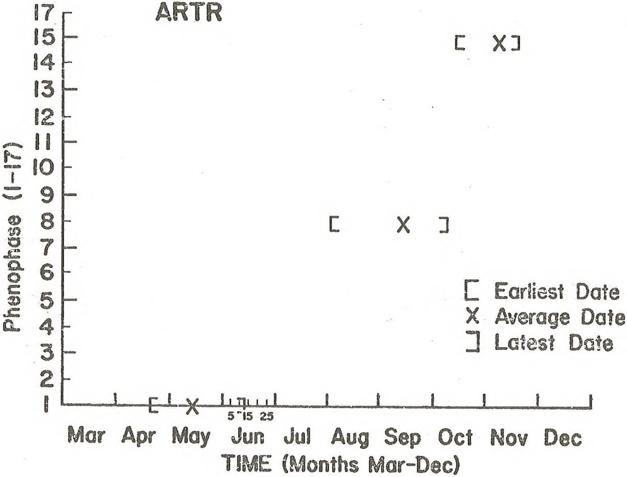


FIGURE 1. (continued)

FIGURE 2. Phenological progression curves for each of the four prime species for each exclosure for the years 1973, 1974 and 1975.

	Page
Agropyron smithii	264
Agropyron spicatum	273
Artemisia nova	277
Artemisia tridentata	279

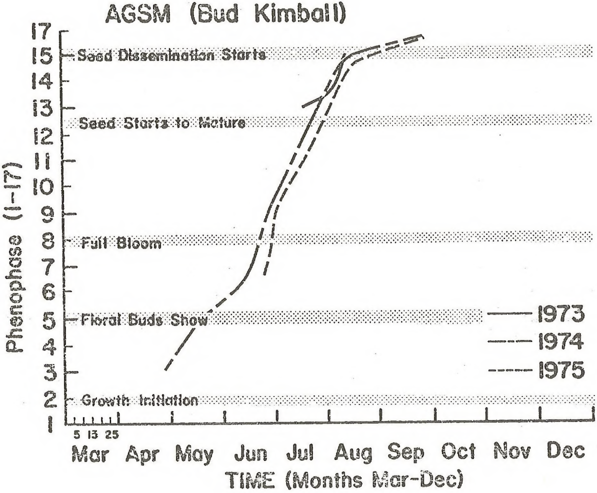


FIGURE 2. Phenological progression curves for each species.

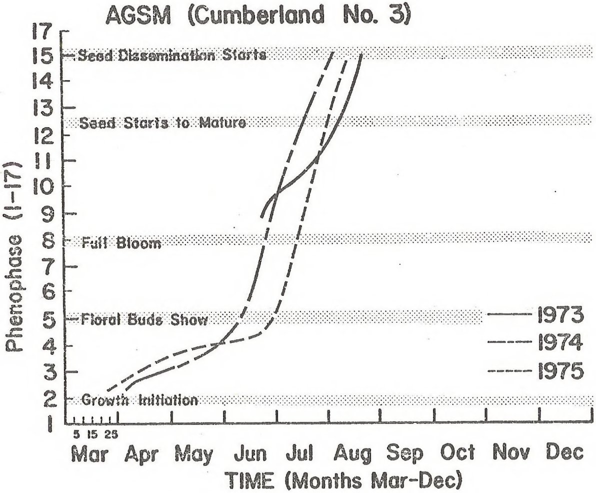


FIGURE 2. (continued)

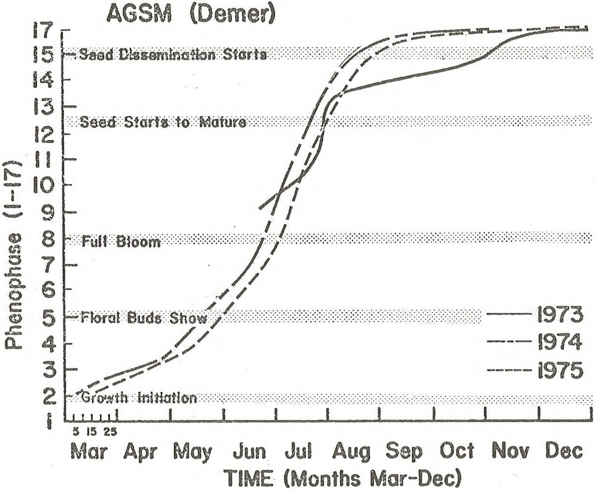


FIGURE 2. (continued)

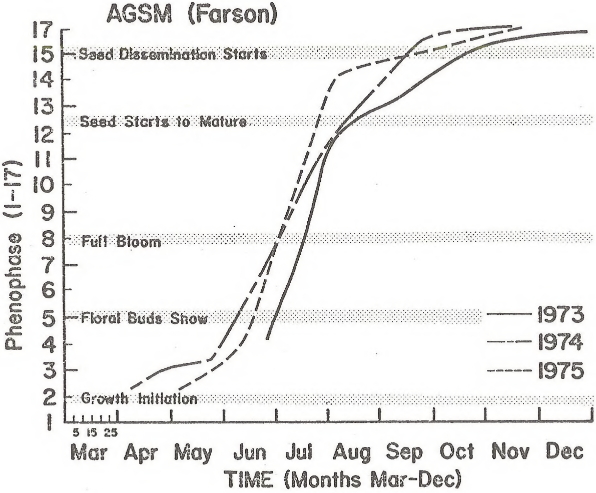


FIGURE 2. (continued)

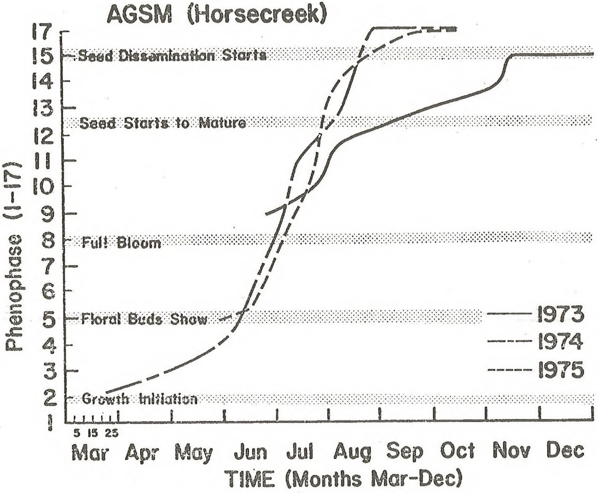
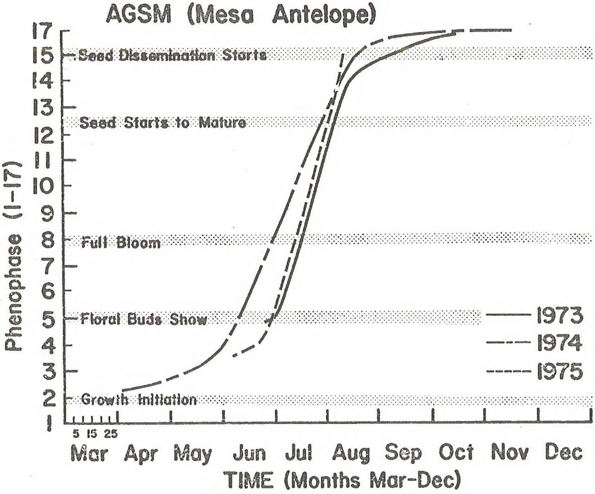


FIGURE 2. (continued)



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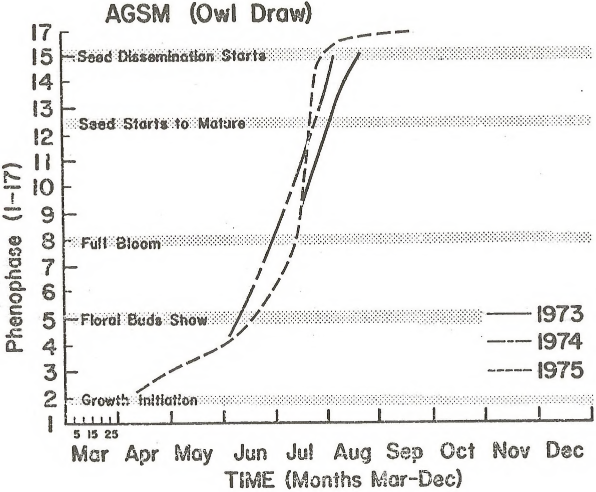

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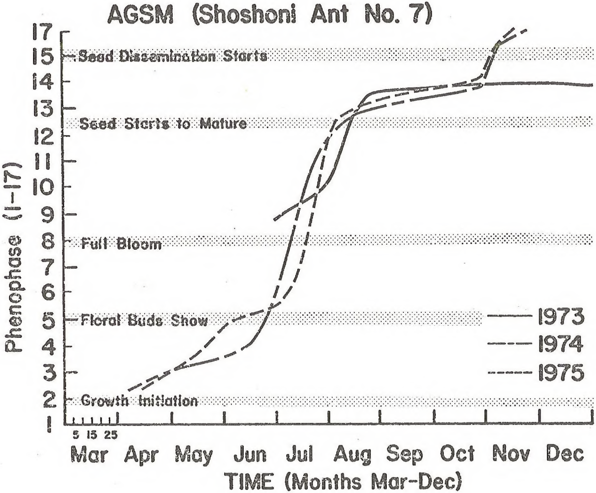

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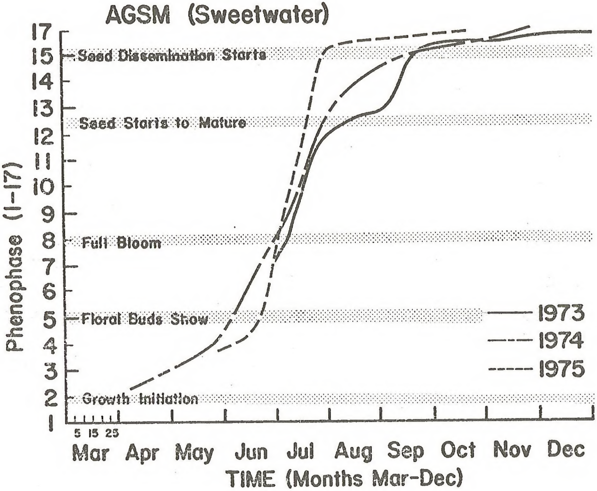


FIGURE 2. (continued)

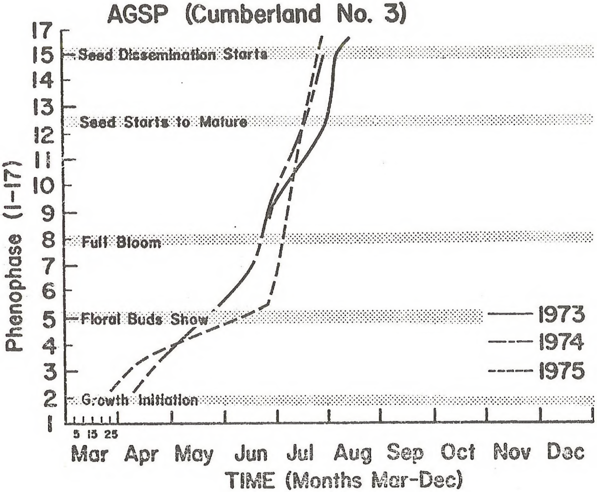
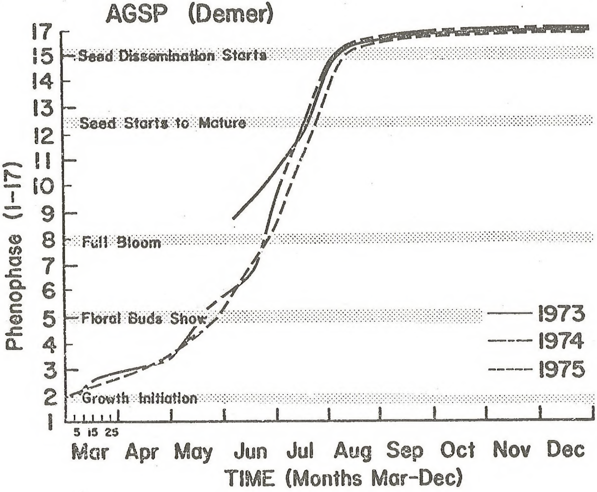


FIGURE 2. (continued)



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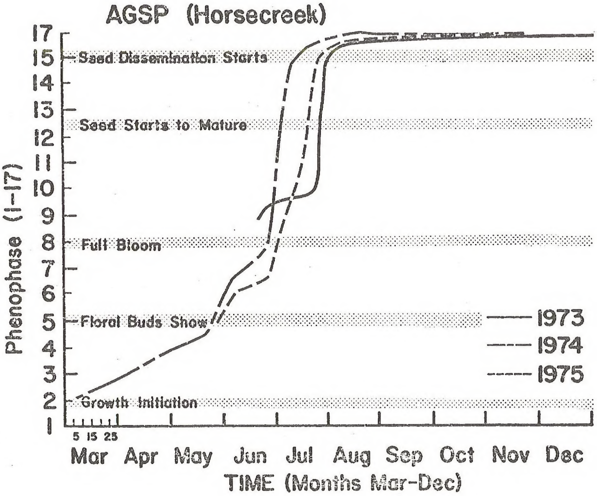

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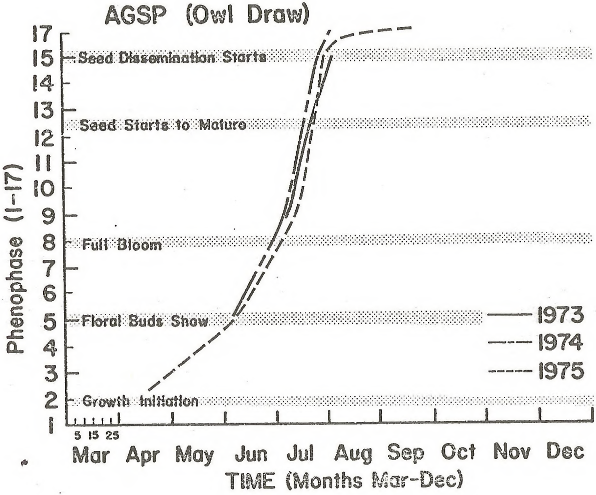

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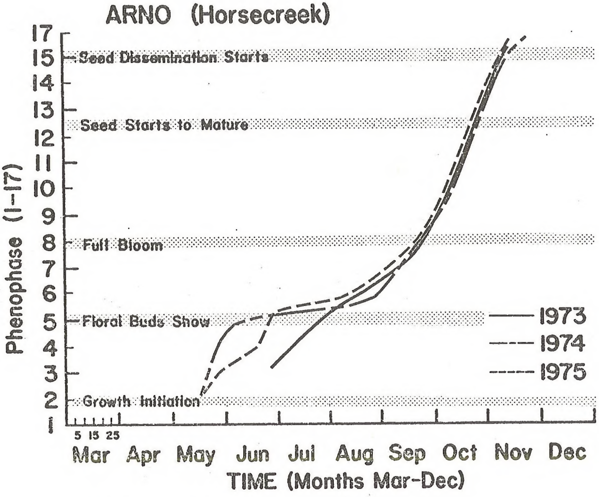

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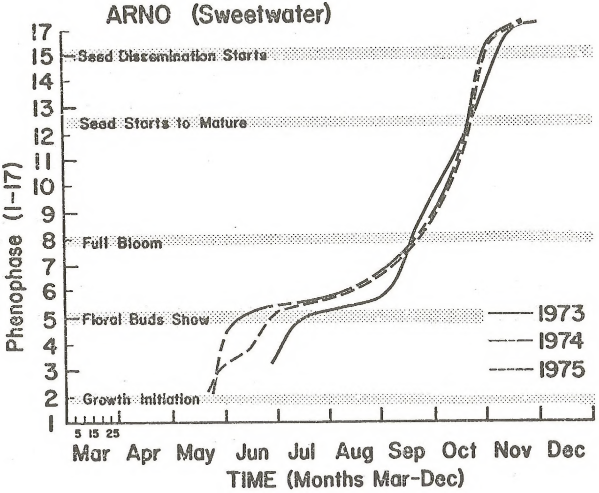
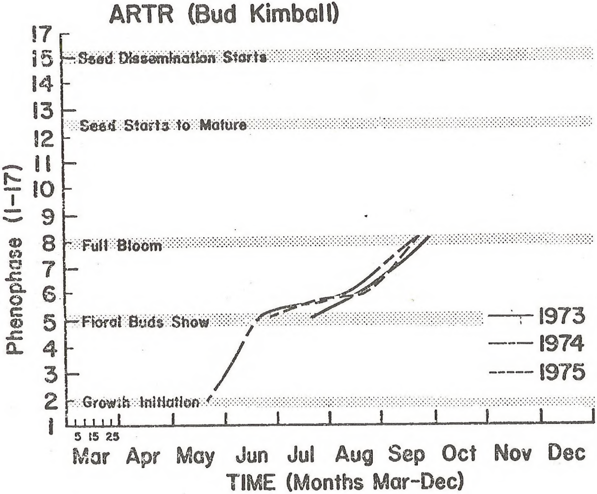


FIGURE 2. (continued)



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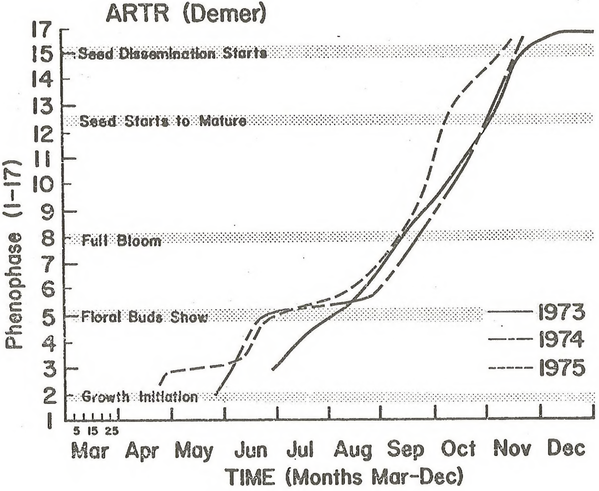

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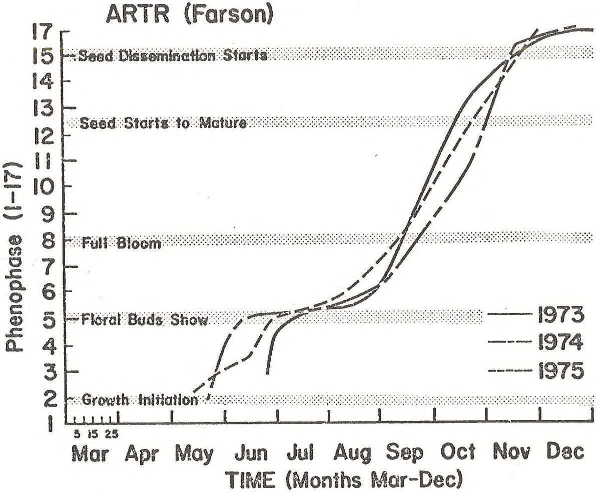

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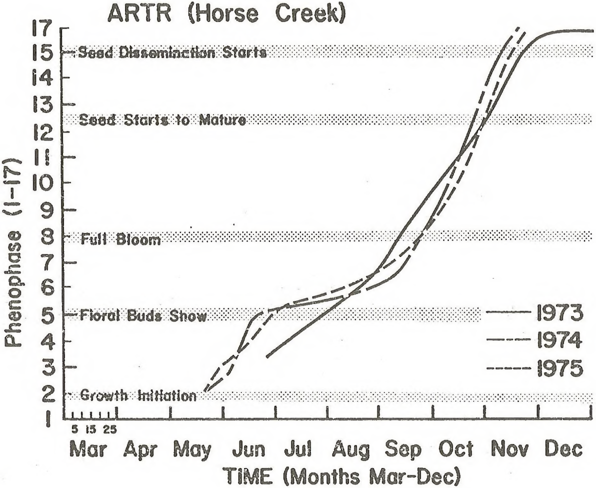

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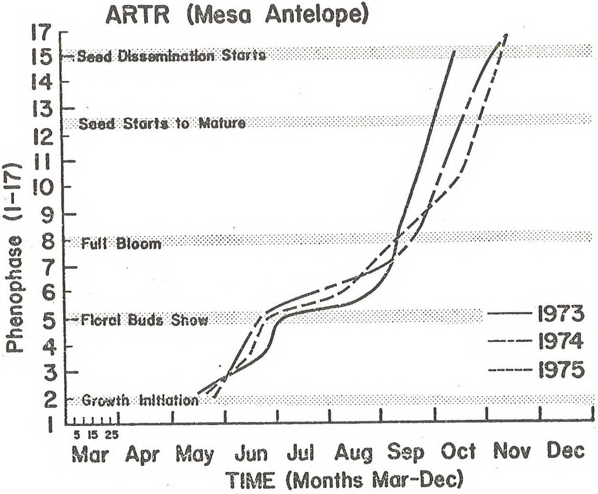

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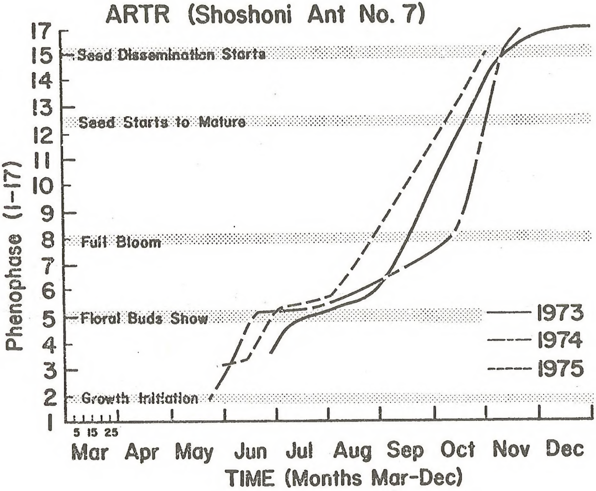

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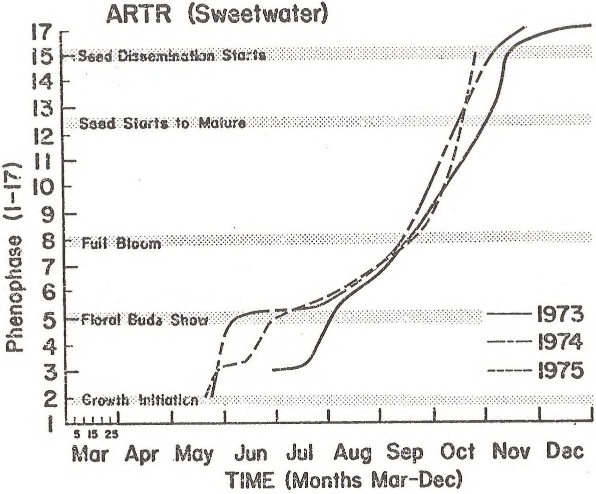

FIGURE 2. (continued)

SECTION II

PRECIPITATION PATTERN STUDY

1975

Introduction

During 1960 over 70 gauges were installed at 6 to 12 mile intervals throughout the Big Horn and Wind River Basins. Since that time approximately 20 gauges in the Big Horn Basin have been discontinued and some 80 gauges have been installed at various exclosures and study sites throughout western Wyoming. These gauges are cans, 12" in height and approximately 2.75" in diameter. Precipitation is read to inches of rainfall by measuring the water in ml. The can diameter allows one hundred ml of water to be equal to 1" of precipitation. The gauges are read on the same four dates each year -- April 15, July 1, September 1 and October 15. Personnel of the Worland, Lander, Rawlins, Casper and Rock Springs Districts of the Bureau of Land Management cooperate with the University in reading the instruments. Some gauges are also read by personnel of the Soil Conservation Service and the Wyoming Game and Fish Commission.

The U. S. Weather Bureau and the U. S. Geological Survey precipitation data are used to provide additional information from other locations. This cooperative effort provides an effective network for future evaluation of precipitation patterns. A map of precipitation gauge locations was presented in the 1963 report.

Precipitation data for 1975 from the University gauges are presented in Table 1; those from the U. S. Weather Bureau stations are presented in Table II.

Results 1975

Precipitation totals for 1975 averaged much higher than in 1974. The significant increase in moisture occurred in the early spring. The above-normal spring moisture resulted in very high forage production, expecially for the shrub species.

Areas dominated by gardener saltbush, such as the Burnt Wagon exclosure, increased in forage production by almost 300 percent. The average annual forage production at the Burnt Wagon exclosure for the eight-year period from 1962-1970 was 271.26 lbs./acre. In 1975 the total forage production was 752.33 lbs./acre, which is a 277 percent increase. Most of this increase was from the very high increase in gardener saltbush production; from an average of 252.21 lbs./acre to 680.03 lbs./acre. On the gardener saltbush areas there was no significant increase in perennial grass production.

Areas dominated by sagebrush-wheatgrass had an increase in grass and forb production of 76 percent. The shrub production increased by about 97 percent.

The precipitation records show that precipitation of either the October-April period or the April to July period was above normal. Closer study of Weather Bureau records shows that most of the above-normal precipitation occurred in March and April.

Table I. Precipitation data for 1975 from University of Wyoming gauges for the periods October 15-April 15 (winter), April 15-July 1 (spring), July 1-September 1 (summer) and September 1-October 15 (fall).

Rain Gauge No.	Rain Gauge Name	Winter Apr. 15 '75	Spring July 1 '75	Summer Sept 1 '75	Fall Oct 15 '75	Total '75	Long Term Average	No. of Years
	Big Horn County							
176	Basin Flats Exc.	2.44	3.86	.25	.26	6.81	6.26	9
123	Big Flat Exc.	2.01	3.70	.18	.27	6.16	5.83	8
24	Halogeton Exc. #1	1.49	2.81	.70	1.01	6.01	5.42	16
167	Halogeton Exc. #2	1.89	3.09	.71	1.22	6.91	6.07	4
168	Halogeton Exc. #3	1.60	2.77	.52	1.04	5.93	5.38	4
12	Horse Creek	4.40	3.82	.68	1.06	9.96	11.19	16
113	Horse Haven	2.39	3.83	.49	.26	6.97	6.64	9
21	Kane Deer	4.70	5.44	.76	1.57	12.47	12.32	11
149	Kane GRI	5.59	5.96	.67	1.61	13.83	13.15	8
116	Kane Seed	2.65	3.39	.72	1.22	7.98	6.94	8
148	Medicine Lodge GRI	6.02	5.40	.70	1.10	13.22	13.74	8
175	Potato Ridge	3.04	3.07	.37	.84	7.32	7.90	8
23	Sheep Springs	DR7.18	3.13	.33	1.31	11.95	13.69	15
174	Sheldon Gulch	1.97	3.20	.36	.81	6.34	7.46	8
	Park County							
147	Big Sage Exc.	3.12	5.11	1.52	.92	10.67	7.96	7
146	Big Sky	3.32	6.00	1.54	.73	11.59	8.89	7
100	Buffalo Basin	3.29	2.11	1.35	1.09	7.84	10.44	9
193	Canyon	4.49	4.53	1.74	2.02	12.78	9.69	3
145	Hilltop Spring	6.76	7.47	1.55	1.55	17.33	15.12	7
184	Little Dry Creek	2.20	4.86	1.67	.55	9.28	9.28	1
192	Skyline	1.50	4.73	2.00	1.51	9.74	7.10	2
191	State Line	2.65	E4.80	1.73	1.35	10.53	6.73	3
	Washakie County							
1	Ant Hill Worland Exc.	2.52	4.38	.60	.58	8.08	6.39	16
150	Big Trails GRI	DR8.07	4.38	.77	1.17	14.39	13.27	8
41	Bud Kimball	3.00	5.00	NR	1.32	9.32	9.33	14
7	Buffalo Creek	4.23	6.84	NR	*		10.41	13
17	Burnt Wagon	2.17	4.73	.43	.40	7.73	6.08	14
179	Chalk	1.92	4.85	.94	.29	8.00	6.25	15
8	Demer	2.23	5.11	NR	3.26	10.60	8.11	16
4	Dutch Nick Flat	2.32	4.71	1.08	.27	8.38	6.85	15
15	15 Mile Study Area (179)							
177	Hawk	2.18	4.67	.40	.38	7.63	6.06	14
166	Mills Burn	DR7.43	3.97	.12	.94	12.46	12.74	5
185	Rice Burn	5.72	5.82	*	1.34		12.52	2
180	Sand Creek	3.12	4.40	.22	.32	8.06	6.54	9
36	Smilo	3.71	6.09	1.04	.77	11.61	8.42	15
181	Tolman Ridge	3.49	4.39	.14	.29	8.31	6.67	9
39	Two Mile Hill	3.74	5.23	NR	1.82	10.79	9.45	15
13	West Pasture	1.75	4.03	.44	.26	6.48	5.57	14
178	Willwood	1.84	4.48	.77	.28	7.37	6.13	15
115	Worland Cattle Co.	2.63	6.25	NR	2.20	11.08	7.74	8
	Hot Springs County							
117	Big Bend Exc.	2.92	6.12	NR	1.73	10.77	9.72	8
76	Cochran	2.83	7.18	NR	1.68	11.69	10.14	15
77	Kirby Creek	2.63	7.55	NR	2.26	12.44	9.20	13
11	Lower Enos Creek	4.47	6.42	1.61	1.21	13.71	10.65	8
133	North Butte (Thermop.)	5.18	8.81	.57	.58	15.14	10.65	4
182	Round Top Mtn.	4.81	VAN	VAN	VAN		10.52	3
75	Sand Gulch	2.49	6.32	NR	2.05	10.86	8.89	14
22	Upper Enos Creek	VAN	7.08	3.11	VAN		15.49	8

Table 1. Continued

Rain Gauge No.	Rain Gauge Name	Winter Apr 15 '75	Spring July 1 '75	Summer Sept 1 '75	Fall Oct 15 '75	Total '75	Long Term Average	No. of Years
	Fremont County							
52	Alkali Flats	2.91	4.72	.94	.58	9.15	8.93	15
5	Ant Plot (Lander)	RI		.41	.65		8.76	13
157	Bar X	2.35	3.33	.31	.44	6.43	6.61	7
89	Birds Eye Ranch	4.30	5.58	.18	.43	10.49	7.93	12
10	Boysen Reservoir	1.03	4.35	.80	.31	6.49	4.99	16
85	Bridger Creek Ranch	SI	9.05	.58	.67	10.30	11.06	13
49	Canyon Creek	2.68	4.15	.41	.72	7.96	8.83	14
59	Carter Divide	NR	10.40	.15	.52	11.07	8.51	14
88	Comet Mine	3.90	7.42	.30	.95	12.57	11.77	13
60	Dishpan Butte #1	8.14	7.17	.43	.65	16.39	11.25	13
61	Dishpan Butte #2	E5.00	5.26	1.10	.58	11.94	9.80	13
86	Dry Creek	2.74	4.58	.61	.48	8.41	6.96	15
58	Empty Cartridge	NR	*	.45	.48		8.25	10
55	Fraser Seed Plot	2.51	.18	.86	.49	4.04	9.17	13
48	Fuller Seed Plot	3.86	4.80	.69	.10	9.45	8.54	15
46	Gibbs Butte	2.33	4.91	.55	.74	8.53	7.06	15
6	Granite Mountain	SI	7.72	1.42	.80	9.94	8.80	12
62	Hall Creek Divide	7.83	6.75	.38	.56	15.52	12.20	14
87	Hoodoo Creek	3.04	5.38	2.28	.85	11.55	6.54	15
64	Hudson	7.55	5.50	.40	.67	14.12	9.65	14
68	Johnson	2.58	4.34	E .60	.23	7.70	7.22	13
63	Little Popo Agie	8.57	5.96	.40	.60	15.53	11.57	14
56	Logan #1	NR	7.10	.41	.58	8.09	9.32	14
57	Logan #2	NR	*	*	.37		8.67	13
16	Lower Gov't Draw	4.90	4.90	.53	.85	11.18	10.93	14
81	Mack Ranch	NR	10.80	.52	.80	12.12	8.29	11
67	Madden	2.60	5.08	.76	.42	8.86	9.89	14
14	McGraw Flat	NR	*	*	*		10.04	13
47	Muskrat Creek	2.18	RI		.37			
50	Muskrat #5	NR	8.15	.78	.50	9.43	8.47	14
51	Poison Creek	2.23	4.73	1.28	.88	9.12	7.84	13
80	Poison Draw	2.20	4.50	1.90	.50	9.10	7.21	15
65	Sand Draw	RI			.26		9.23	12
169	Shoshoni Ant #2	2.40	5.72	.67	.49	9.28	8.91	4
170	Shoshoni Ant #4	2.28	5.15	.32	.58	8.33	8.22	4
158	Shoshoni Ant #7	2.18	5.80	.49	.48	8.95	8.86	5
171	Shoshoni Ant #9	2.28	5.30	.62	.51	8.71	8.43	4
172	Shoshoni Ant #8	2.15	5.83	.48	.58	9.04	8.41	4
173	Shoshoni Ant #11	2.20	5.85	.76	.53	9.34	8.62	4
11	Sweetwater	2.65	8.45	3.61	.63	15.34	8.89	13
9	Upper Gov't Draw	7.20	6.88	.36	.75	15.19	9.16	14
	Natrona County							
143	Arminto Exc.	2.90	3.75	2.11	.28	9.04	5.81	8
109	Bolton Creek	5.83	4.23	.90	.70	11.66	9.27	7
141	Donlin	2.89	4.45	.79	.39	8.52	7.72	8
110	E.K.	2.90	3.75	2.11	.28	9.04	5.81	8
142	Merino	4.10	2.62	1.01	.19	7.92	9.12	8
108	Mud Springs	SI	9.89	1.80	1.15	12.84	11.80	8
107	Owl Draw	4.81	4.44	1.31	.80	11.36	10.12	9
144	Poison Spider	3.31	4.30	.62	.13	8.36	9.34	8
106	Stinking Creek	3.12	3.82	2.95	.62	10.51	9.91	9
	Carbon County							
186	Flattop	4.78	3.16	1.30	1.00	10.24	9.87	3
27	Little Robber #5	4.89	2.65	1.92	.77	10.23	9.96	13
128	Oppenheimer #1	5.08	2.38	.85	.55	8.86	9.99	8
124	Poison Butte #1	5.43	2.53	WO	2.04	10.00	10.99	8
125	Poison Butte #2	6.72	2.53	1.64	.59	11.48	11.08	8
130	Powder Rim Pasture C #1	3.88	2.58	1.09	.51	8.00	8.54	8
26	Red Wash #1	3.63	2.15	1.07	.93	7.78	8.36	14
25	Red Wash #3	3.30	3.05	.95	.95	8.25	8.77	14

Table I. Continued

Rain Gauge No.	Rain Gauge Name	Winter Apr 15 '75	Spring July 1 '75	Summer Sept 1 '75	Fall Oct 15 '75	Total '75	Long Term Average	No. of Years
	Sweetwater County							
20	Black Mountain Exc.	2.25	4.47	1.20	.92	8.84	7.55	14
30	Boars Tusk	RI					7.57	11
18	Cedar Mountain	2.05	4.97	.79	.43	8.24	8.47	14
102	Chandler Simpson Well	1.93	2.50	.06	.00	4.49	6.00	7
103	Daley Hay Corral	2.75	3.71	.28	.41	7.15	7.26	9
2	Farson	RI					6.52	12
104	J.O. Headquarters	3.69	3.75	.25	1.08	8.77	7.98	10
105	Len Hay Corral	2.74	3.03	.20	.41	6.38	6.95	10
131	Powder Rim Pasture D #1	3.64	2.63	.94	.92	8.13	7.87	8
136	Powder Rim Pasture B #1E	3.95	2.46	1.21	.81	8.43	8.94	8
137	Powder Rim Pasture B #2	5.01	3.39	.49	.85	9.74	10.91	8
139	Powder Rim Pasture A #1	3.54	3.29	1.46	.90	9.19	9.46	8
19	Radio Tower	2.76	3.35	.75	1.18	8.04	7.36	15
28	Red Wash #2	3.11	3.24	.75	.58	7.68	7.63	14
101	Ten Mile Ridge	2.16	2.89	.24	.49	5.78	5.51	8
	Uinta County							
31	Cumberland #1	5.08	2.30	1.24	E .90	9.52	8.29	11
34	Cumberland #4	4.35	3.30	1.49	E .95	10.09	8.61	11
	Lincoln County							
32	Cumberland #2 Exc.	5.48	1.58	1.42	E .85	9.33	9.60	12
33	Cumberland #3	7.71	1.78	1.25	E1.20	11.94	11.27	12
35	Elk Mountain Pit	NR	8.09	.58	E2.30	10.97	9.37	11
	Sublette County							
187	Antelope Exc.							
188	North Mesa							
189	Sand Draw Pasture							
190	North Alkali							

RI = Record Incomplete
NR = Not Read until later date
*/ = Gauge blown over (damaged)
DR = Delayed Reading (Washakie Co. #166 - 18 May)
VAN = Vandalized
SI = Snowed In
WO = Road Washed Out
E = Estimated

TABLE II. Precipitation data from selected U. S. Weather Bureau Stations for the period October 15, 1974 to October 15, 1975. [1]

Section Name	Winter Oct 16 to Apr 15	Spring Apr 16 to Jul 1	Summer Jul 1 to Sept 1	Fall Sept 1 to Oct 15	1975 Totals[2]	Long Term Average[3]	Years of Record
Big Horn Basin							
Anchor Dam	4.95	8.31	2.03	.73	16.02	15.28	14
Basin	2.96	3.81	.80	1.03	8.60	6.47	68
Black Mountain	5.16	8.95	.82	1.00	15.93	11.17	13
Cody	4.48	4.95	2.03	1.08	12.54	11.72	65
Cody 12 SE	5.16	6.18	2.62	.94	14.90	12.55	13
Emblem	3.08	3.60	.80	1.36	8.84	5.58	29
Grass Creek E 21	---	4.16	3.26	1.70	----	11.68	23
Greybull	9.50	3.85	.88	1.00	15.23	7.49	24
Lovell	3.18	2.23	.83	1.40	7.64	6.95	63
Powell	2.18	2.99	2.95	.93	9.05	6.09	66
Rairden 2 WSW	3.36	4.40	.28	.74	8.78	7.01	24
Shell 4 ENE	5.48	4.31	.74	.35	10.88	8.93	17
Tensleep 4 NE	5.73	7.54	.84	1.11	15.22	12.95	12
Tensleep 16 SSE	4.43	8.12	.80	1.63	14.98	---	--
Thermopolis 2	4.91	9.89	.79	1.27	16.86	11.17	11
Thermopolis 25 WNW	4.34	6.82	2.19	1.62	14.97	11.48	18
Worland	3.03	4.52	.04	.92	8.51	7.40	62
Worland FAA AP	2.91	5.47	.38	.83	9.59	5.67	15
Wind River Basin							
Boysen Dam	3.52	7.51	.54	1.10	12.67	7.88	29
Diversion Dam	7.08	3.14	.59	.47	11.28	9.74	13
Lander WSD AP	5.36	7.47	.39	.77	13.99	13.84	84
Lost Cabin	3.47	5.44	.50	.64	10.05	6.52	14
Pavillion	1.93	5.63	1.54	.56	9.66	8.82	51
Riverton	2.95	5.37	.49	.59	9.40	8.56	56
Sand Draw	---	---	---	.24	---	9.11	28
Shoshoni	2.31	5.44	1.12	.83	9.70	5.41	35
Southwest Wyoming							
Big Piney	4.51	2.95	---	---	---	---	38
Farson	3.47	2.50	.18	1.17	7.32	7.61	52
Green River	2.24	3.71	.83	.94	7.72	8.54	69
Kemmerer 4 SW	5.45	4.63	1.47	.95	12.50	9.53	42
Pinedale	4.29	2.90	2.02	1.69	10.90	11.23	52
Rock Springs	4.30	4.50	1.46	1.06	11.32	8.11	35
Rock Springs FAA AP	1.97	2.69	.89	.55	6.10	8.79	43
Sage 4 NNW	closed	---	---	---	---	9.27	47
Wamsutter	2.74	2.82	1.08	.66	7.30	6.11	35
Muddy Gap	3.83	5.10	2.18	.56	11.67	11.85	26
Rawlins FAA AP	2.84	2.76	1.78	1.30	8.68	10.83	36
South Pass City	7.26	5.42	1.01	.94	14.63	13.73	67

[1] Weather Bureau, 1975. Climatological Data-Wyoming Annual Summary of Commerce, Vols. 83-84.

[2] Computed for the period October 15, 1974, to October 15, 1975.

3/Weather Bureau, 1974. Climatological Data-Wyoming Annual Summary. U. S. Dept. of Commerce, Vol. 83, No. 13, and John Alyea, U. S. Weather Bureau, Cheyenne.

SECTION III

EXCLOSURE STUDIES (PRODUCTION, COVER, AND PRECIPITATION PHASE)

1975

Studies of vegetation forage production from several exclosures and relic areas of the Big Horn and Wind River Basins were initiated during the 1962 field season. These studies have been expanded and continued annually since this time to include 40 different exclosures throughout the western half of Wyoming. The objectives of the program are to determine:

(1) the relationship of annual herbage production to area cover percentage;

(2) the relationship of annual herbage production changes to variations in time and amount of available moisture;

(3) the relationship of plant height of major forage species to annual herbage production and to time and amount of available moisture;

(4) influence of several range improvement practices on herbage production and area cover;

(5) the relationship of percentage frequency to area cover and herbage production.

Methods and Procedures

Area cover and herbage production studies on sagebrush-grass sites were conducted on transects of 20 quadrats, 1' x 1', spaced systematically along a randomly located 100' steel tape.

On sites dominated by saltbush, a variation of the sampling technique, described in the 1968 results, was used to measure herbage production. Twenty 1' x 10' plots were located systematically along a randomly located 100' steel tape. Each 1' x 10' plot was subsampled for vegetative cover using 10 1' x 1' plots.

Area cover of all herbaceous semi-woody and woody species was estimated within each square foot plot. Data of shrub crown cover and basal cover of plains pricklypear, Hood's phlox and Hooker sandwort were not combined when comparing area cover to herbaceous production since this group of plants was not clipped.

Forage production was determined by clipping herbaceous species at ground or crown level. The clipping procedure was conducted on or near the same date as the previous years for each exclosure. Clippings were oven-dried at 70° C for 24 hours prior to weighing.

On areas where utilization had occurred prior to clipping, utilization estimates by species were made. These estimates were made at the same time and on the same plots where clipping was done. The utilization values were averaged by species for the 20 plots and later used to adjust production for vegetation lost by utilization.

As in 1968, 1971 and 1974, production of shrubby and mat forming species was determined by adding the shrubby and mat forming species production to the clipped production, and index of total production was derived. Shrub and mat forming plant production was obtained by a modified double-sampling technique during early September.

Weight units are estimated on 20 quadrats, 4' x 5', spaced 6 - 12 steps apart across the study area. Weight units of characteristic shape and size are determined before estimates are made. Later 2 to 3 weight units per species are clipped. After drying in the oven at 70° C for 96 hours each unit is weighed. Average unit weights are later used to change the estimated units to grams and then to pounds per acre.

At the same time clipped production data are collected, pictures of the transects are taken giving a pictorial history from year to year at each study location.

Precipitation data are recorded from simple aluminum rain gauges installed at each exclosure. The rain gauge has a diameter of 2.75 inches; so each 100 milliliters of water recorded in the gauge equals one inch of precipitation. Oil is added to each gauge after reading to prevent evaporation. During the winter months antifreeze is added in known amounts to keep the gauges from freezing and breaking. Precipitation data are collected four times a year -- April 15, July 1, September 1 and October 15.

Names of plants which occurred in the production study areas are shown in Table I. Included are four letter code, genus, species, common names, life form and characteristic longevity of the plants.

Results 1975

The information presented in this 1975 annual report is in the same format as past Arid Land Ecology Annual Reports. Basal cover, frequency, production and precipitation data are presented on summary sheets, one summary for each study area treatment. Table II gives an alphabetical listing of study areas, the county where each is located, the treatments studied at each area, and also serves as a table of contents for reference to specific pages concerning each study area.

Production on each summary sheet is broken down into clipped production (herbaceous species), shrub production, total production for locations where utilization of vegetation had occurred prior to clipping. Table III gives the exclosures and utilization percentages for sites where utilization had occurred. Study areas not mentioned showed no significant amount of utilization.

Precipitation totals for 1975 averaged much higher than in 1974. The significant increase in moisture occurred in the early spring. The above-normal spring moisture resulted in very high forage production, especially for the shrub species.

Areas dominated by gardener saltbush, such as the Burnt Wagon exclosure, increased in forage production by almost 300 percent. Total forage production at the Burnt Wagon exclosure for the eight-year average of 1962 - 1970 was 271.26 lbs./acre. In 1975 the total forage production was 752.33 lbs./acre, which is a 277 percent increase. Most of this increase was from the very high increase in gardener saltbush production; from an average of 252.21 lbs./acre to 680.03 lbs./acre.

On the gardener saltbush area there was no significant increase in perennial grass production.

Areas dominated by sagebrush-wheatgrass had an increase in grass and forb production of 76 percent. The shrub production increased by about 97 percent.

The precipitation records show that precipitation of either the October-April period or the April to July period was above normal. Closer study of Weather Bureau records show that most of the above-normal precipitation occurred in March and April.

TABLE I. LIST OF PLANT NAMES WHICH OCCURRED IN PRODUCTION STUDY AREAS.

Code	Genus-Species	Common Name	Life Form	Longevity
AGCR	Agropyron cristatum	Crested wheatgrass	Grass	Perennial
AGGL	Agoseris glauca	Pale agoseris	Forb	Perennial
AGSM	Agropyron smithii	Western wheatgrass	Grass	Perennial
AGSP	Agropyron spicatum	Bluebunch wheatgrass	Grass	Perennial
ALTE	Allium textile	Textile onion	Forb	Perennial
AMAL	Amelanchier alnifolia	Western serviceberry	Shrub	Perennial
ANDI	Antennaria dimorpha	Low pussytoe	Forb	Perennial
ANRO	Antennaria rosea	Rose pussytoes	Forb	Perennial
ARCO	Arenaria congesta	Ballhead sandwort	Forb	Perennial
ARFR	Artemisia frigida	Fringed sagewort	Half-shrub	Perennial
ARHO	Arenaria hookeri	Hooker sandwort	Forb	Perennial
ARHO^2	Arabis holboellii	Holboell rockcress	Forb	Perennial
ARLI	Arabis lignifera	Woody rockcress	Forb	Annual
ARLO	Aristida longiseta	Red three-awn	Grass	Perennial
ARNO	Artemisia nova	Black sagebrush	Shrub	Perennial
ARSP	Artemisia spinescens	Bud sagebrush	Half-shrub	Perennial
ARTR	Artemisia tridentata	Big sagebrush	Shrub	Perennial
ARTRb.	Artemisia tridentata ssp. Wyomingensis	Wyoming big sagebrush	Shrub	Perennial
AST	Astragalus spp.	Milkvetch	Forb	Perennial
ASCA	Aster canescens	Hoary aster	Forb	Perennial
ASCI	Astragalus cibarius	Silky milkvetch	Forb	Perennial
ASDI	Astragalus diversifolius	Meadow milkvetch	Forb	Perennial
ASPU	Astragalus purshii	Pursh loco	Forb	Perennial
ASKE	Astragalus kentrophyta	Nuttall kentrophyta mv.	Forb	Perennial
ASSP	Astragalus spatulatus	Tufted milkvetch	Forb	Perennial
ATCO	Atriplex confertifolia	Shadscale saltbush	Shrub	Perennial
ATGA	Atriplex gardneri	Gardner saltbush	Half-shrub	Perennial
BASA	Balsamorhiza sagittata	Arrowleaf balsamroot	Forb	Perennial
BOGR	Bouteloua gracilis	Blue grama	Grass	Perennial
BRCO	Bromus commutatus	Hairy chess	Grass	Annual
BRTE	Bromus tectorum	Cheatgrass	Grass	Annual
CAAN	Castilleja angustifolia	Narrowleaf indian paintbrush	Forb	Perennial
CAEL	Carex eleocharis	Needleleaf sedge	Sedge	Perennial
CAFI	Carex filifolia	Threadleaf sedge	Sedge	Perennial
CAMI	Camelina microcarpa	Littlepod falseflax	Forb	Annual
CANU	Calochortus nuttallii	Sego mariposalily	Forb	Perennial
CAS	Castilleja spp.	Paintbrush	Forb	Perennial
CHDO	Chaenactis douglasii	Douglas dustmaiden	Forb	Perennial
CHFR	Chenopodium fremontii	Fremont goosefoot	Forb	Annual
CHNA	Chrysothamnus nauseosus	Rubber rabbitbrush	Shrub	Perennial
CHVI	Chrysothamnus viscidiflorus	Green rabbitbrush	Shrub	Perennial
CIR	Cirsium spp.	Thistle	Forb	Perennial
COPA	Comandra pallida	False toadflax	Forb	Perennial
CORA	Cordylanthus ramosus	Branched birdbeak	Forb	Annual
CRBR	Cryptantha bradburiana	Miners candle	Forb	Perennial
CRFL	Cryptantha flavoculata	Cryptantha	Forb	Perennial
CRE	Crepis spp.	Hawksbeard	Forb	Perennial
CYMO	Cymopterus montanus	False carrot	Forb	Perennial

TABLE I. (continued)

Code	Genus-Species	Common Name	Life Form	Longevity
DEGE	Delphinium geyeri	Plains larkspur	Forb	Perennial
DEPI	Descurainia pinnata	Pinnate tansymustard	Forb	Annual
ERAS	Erysimum asperum	Plains wallflower	Forb	Perennial
ERCA	Erigeron canadensis	Horseweek fleabane	Forb	Annual
ERFL	Eriogonum flavum	Yellow wildbuckwheat	Half-shrub	Perennial
ERMI	Eriogonum microthecum	Slenderbrush wildbuckwheat	Forb	Perennial
EROV	Eriogonum ovalifolium	Cushion eriogonum	Forb	Perennial
ERPU	Erigeron pumilus	Fleabane	Forb	Perennial
ERSU	Eriogonum subalpinum	Subalpine eriogonum	Forb	Perennial
ERI$_2$	Erigeron spp.	Fleabane	Forb	Perennial
ERI	Eriogonum spp.	Eriogonum	Forb	Perennial
EULA	Eurotia lanata	Winterfat	Half-shrub	Perennial
GACO	Gaura coccinea	Scarlet gaura	Forb	Perennial
GIAG	Gilia aggregata	Skyrocket gilia	Forb	Perennial
GRSP	Grayia spinosa	Spiny hopsage	Shrub	Perennial
GUSA	Gutierrezia sarothrae	Broom snakeweed	Half-shrub	Perennial
HAAC	Haplopappus acaulis	Stemless goldenweed	Forb	Perennial
JUOS	Juniperus osteosperma	Utah Juniper	Tree	Perennial
JUSC	Juniperus scopulorum	Rockymountain juniper	Shrub	Perennial
KOAM	Kochia americana	Greenmolly summercypress	Shrub	Perennial
KOCR	Koeleria cristata	June grass	Grass	Perennial
LARE	Lappula redowskii	Stickseed	Forb	Annual
LEAL	Lesquerella alpina	Alkaline bladderpod	Forb	Perennial
LEDE	Lepidium densiflorum	Prairie pepperweed	Forb	Annual
LELU	Lesquerella ludoviciana	Foothill bladderpod	Forb	Perennial
LEPU	Leptodactylon pungens	Granite gilia	Forb	Perennial
LERE	Lewisia rediviva	Bitterroot	Forb	Perennial
LILE	Linum lewisii	Blue flax	Forb	Perennial
LUPU	Lupinus pusillus	Rusty lupine	Forb	Annual
MACA	Machaeranthera canescens	Hoary aster	Forb	Perennial
MAGL$_4$	Machaeranthera glabriuscula	Woody aster	Half-shrub	Perennial
MAGR	Machaeranthera grindeloides	Woody aster	Forb	Perennial
MAVI	Mamillaria vivipara	Pink pincushion cactus	Forb	Perennial
MELO	Mertensia longiflora	Small bluebells	Forb	Perennial
OECA	Oenothera caespitosa	Tufted evening primrose	Forb	Perennial
OPPO	Opuntia polyacantha	Plains pricklypear	Forb	Perennial
ORFA	Orobanche fasciculata	Tufted broomrape	Sapprophyte	Perennial
ORHY	Oryzopsis hymenoides	Indian ricegrass	Grass	Perennial
OXLA	Oxytropis lambertii	Lambert crazyweed	Forb	Perennial
PECL	Penstemon cleburnei	Cleyburn penstemon	Forb	Perennial
PEFR	Penstemon fremonti	Fremont penstemon	Forb	Perennial
PELA	Penstemon laricifolius	Larchleaf penstemon	Forb	Perennial
PEN	Penstemon spp.	Penstemon	Forb	Perennial
PHHO	Phlox hoodii	Hood's phlox	Forb	Perennial
PHLO	Phlox longifolia	Long-leaf phlox	Forb	Perennial
PLPA	Plantago patagonica	Wooly indianwheat	Forb	Annual
PLSP	Plantago spinescens	Spiny indianwheat	Forb	Annual
POFE	Poa fendleriana	Muttongrass	Grass	Perennial
POSE	Poa secunda	Sandberg bluegrass	Grass	Perennial
PSTE	Psoralea tenuiflora	Slimflower scurfpea	Forb	Perennial

TABLE I. (continued)

Code	Genus-Species	Common Name	Life Form	Longevity
RHTR	Rhus trilobata	Skunkbush sumac	Shrub	Perennial
SAKA	Salsola kali	Russian thistel	Forb	Annual
SED	Sedum spp.	Stonecrop	Forb	Perennial
SEN	Senecio spp.	Groundsel	Forb	
SIHY	Sitanion hystrix	Squirreltail bottlebrush	Grass	Perennial
SILI	Sisymbrium linifolium	Tumblemustard	Forb	Annual
SPCO	Sphaeralcea coccinea	Scarlet globemallow	Forb	Perennial
SPCR	Sporobolus cryptandrus	Sand dropseed	Grass	Perennial
STCO	Stipa comata	Needleandthread	Grass	Perennial
SYOC	Symphoricarpos occidentalis	Western snowberry	Shrub	Perennial
TECA	Tetradymia canescens	Gray horsebrush	Shrub	Perennial
TESP	Tetradymia spinosa	Spiny horsebrush	Shrub	Perennial
TOIN	Townsendia incana	Hoary townsendia	Forb	Perennial
TRI	Trifolium spp.	Clover	Forb	
TRDU	Tragopogon dubius	Salsify	Forb	Biennial
UMB	Umbelliferae fam.	Carrot fam.		
VIAM	Vicia americana	American vetch	Forb	Perennial
VINU	Viola nuttallii	Nuttall violet	Forb	Perennial
VIVA	Viola vallicola	Nuttall violet	Forb	Perennial
VUOC	Vulpia octoflora	Common sixweeksgrass	Grass	Annual
YUGL	Yucca glauca	Small soapweed	Forb	Perennial
ZYVE	Zygadenus venenosus	Death camus	Forb	Perennial

TABLE II. An alphabetical listing of study areas, the county where each occurs, the treatments studied at each area, and table of contents.

County Name Code	Exclosure Name	County	Treatment	Page
2017	Big Trails G.R.I. Exc.	Washakie	Inside Spray Outside Native	
1002	Boysen Reservoir Exc.	Fremont	Inside Native Outside Native	
2007	Bud Kimball Exc.	Washakie	Inside Native Outside Native Inside Spray Outside Spray	
2002	Buffalo Creek Exc.	Washakie	Inside Native Outside Native	
2003	Burnt Wagon Exc.	Washakie	Inside Native Outside Native	
1501	Cochran Exc.	Hot Springs	Inside Native Inside Pitted Outside Native Outside Spray	
1901	Cumberland Exc. #1	Uinta	Inside Native Outside Native Inside Spray Outside Spray	
1201	Cumberland Exc. #2	Lincoln	Inside Native Outside Native Inside Spray Outside Spray	
1202	Cumberland Exc. #3	Lincoln	Inside Native Outside Native Inside Spray Outside Spray	
1902	Cumberland Exc. #4	Uinta	Inside Native Outside Native	
2004	Demer Exc.	Washakie	Inside Native Outside Native	
2005	Dutch Nick Exc.	Washakie	Inside Native Outside Native	
0404	Farson Exc.	Sweetwater	Inside Native Outside Native	
1007	Granite Mountain Exc.	Fremont	Inside Native Outside Native Inside Spray Outside Spray	
0901	Halogeton Pasture Exc. #1	Big Horn	Inside Native	
0905	Halogeton Pasture Exc. #2	Big Horn	Inside Native	
0903	Halogeton Pasture Exc. #3	Big Horn	Inside Native	

TABLE II. (continued)

County Name Code	Exclosure Name	County	Treatment	Page
0913	Horse Creek Exc.	Big Horn	Inside Agsp	
			Outside Agsp	
			Inside Agsm	
			Outside Agsm	
0914	Kane Deer Exc.	Big Horn	Inside Native	
			Outside Native	
			Inside Spray	
			Outside Spray	
0921	Kane G.R.I. Exc.	Big Horn	Inside Native	
			Outside Spray	
1502	Kirby Creek Exc.	Hot Springs	Inside Native	
			Outside Native	
1001	Lander Ant Exc.	Fremont	Inside Native	
			Outside Native	
1003	Lower Gov't Draw Exc.	Fremont	Inside Native	
			Outside Native	
			Inside Spray	
			Outside Spray	
1004	McGraw Flat Exc.	Fremont	Inside Native	
			Outside Native	
0920	Medicine Lodge B.R.I. Exc.	Big Horn	Inside Spray	
			Outside Native	
2301	Mesa Antelope	Sublette	Inside Native	
			Outside Native	
1503	North Butte Relic Area	Hot Springs	Native	
1504	Round Top Relic Area	Hot Springs	Native	
1505	Sand Gulch Exc.	Hot Springs	Inside Native	
			Outside Native	
1009	Shoshone Ant Exc. #2 North	Fremont	Inside Native	
	South		Inside Native	
			Outside Native	
1011	Shosone Ant Exc. #4 North	Fremont	Inside Native	
	South		Inside Native	
			Outside Native	
1013	Shoshone Ant Exc. #7 North	Fremont	Inside Native	
	South		Inside Native	
			Outside Native	
1014	Shoshone Ant Exc. #8 North	Fremont	Inside Native	
	South		Inside Native	
			Outside Native	
1015	Shoshone Ant Exc. #9 North	Fremont	Inside Native	
	South		Inside Native	
			Outside Native	

TABLE II. (continued)

County Name Code	Exclosure Name	County	Treatment	Page
1017	Shoshone Ant Exc. #11 North	Fremont	Inside Native	
	South		Inside Native	
			Outside Native	
2009	Smilo Exc.	Washakie	Inside Native	
			Outside Native	
			Inside Spray	
			Outside Spray	
1005	Sweetwater Exc.	Fremont	Inside Arno	
			Outside Arno	
			Inside Artr	
			Outside Artr	
2010	Two Mile Hill Exc.	Washakie	Inside Native	
			Outside Native	
1006	Upper Gov't Draw Exc.	Fremont	Inside Native	
			Outside Native	
			Inside Spray	
			Outside Spray	
2006	West Pasture Exc.	Washakie	Inside Native	
			Outside Native	

TABLE III. Adjustments in production for utilization occurring prior to clipping.

Exclosure	Treatment	Species	% Utilization	Adjusted Production (#1A)
Cumberland #1	Out native	AGSM	25	55.21
	Out spray	AGSM	25	73.41
Cumberland #2	Out native	AGSM	30	158.36
		POFE	35	17.69
				176.05
	Out spray	AGSM	30	158.23
		POFE	35	26.32
				184.55
Cumberland #3	Out native	AGSM	10	85.72
		AGSP	15	129.15
		POFE	25	10.86
				225.73
	Out spray	AGSM	15	136.83
		AGSP	15	225.02
		POFE	40	66.48
				428.32
Granite Mtn.	Out native	AGSM	10	198.23
		POFE	25	160.86
				359.09
Horse Creek	Out AGSM	AGSM	45	253.64
	Out AGSP	AGSM	45	159.09
		AGSP	30	84.95
				244.04
Lower Gov't Draw	Out native	AGSM	70	113.85
		POFE	35	22.74
				136.59
	Out spray	AGSM	20	286.60
		POFG	40	21.51
				308.11
McGraw Flats	Out native	POFG	30	141.19
Mesa Antelope	Out native	AGSM	15	83.32
		ORHY	20	8.35
				91.67

TABLE III. (continued)

Exclosure	Treatment	Species	% Utilization	Adjusted Production (#1A)
Shoshoni Ant #2	In native NO.	ORHY	30	7.86
		STCO	10	52.97
				60.83
	Out native	AGSM	15	76.80
		BOGR	05	123.07
				199.87
Shoshoni Ant #4	In native SO.	AGSM	20	50.33
		SPCO	25	6.48
				57.01
Shoshoni Ant #7	Out native	AGSM	10	61.00
Shoshoni Ant #8	Out native	AGSM	10	102.57
		STCO	10	44.47
				147.04
Upper Gov't Draw	Out native	AGSM	20	208.93
		KOCR	30	59.80
				268.73
	Out spray	AGSM	25	221.41
		KOCR	35	26.00
		STCO	35	33.52
				280.93

TABLE IV. Vegetation cover data, precipitation and herbage production data alphabetically by exclosure, grazing treatment and shrub control treatment.

		Page
Big Trails GRI Exclosure		306
Boysen	"	308
Bud Kimball	"	310
Buffalo Creek	"	314
Burnt Wagon	"	316
Cochran	"	318
Cumberland #1	"	322
Cumberland #2	"	326
Cumberland #3	"	330
Cumberland #4	"	334
Demer	"	336
Dutch Nick	"	338
Farson	"	340
Granite Mountain	"	342
Halogeton #1	"	346
Halogeton #2	"	347
Halogeton #3	"	348
Horse Creek	"	349
Kane Deer	"	353
Kane GRI	"	357
Kirby Creek	"	359
Ant Plot Lander	"	361
Lower Gov't Draw	"	363
McGraw Flats	"	367
Medicine Lodge GRI	"	369
Mesa Antelope	"	371
North Butte Relic	"	373
Round Top Relic	"	374
Sand Gulch	"	375
Shoshoni Ant #2	"	377
Shoshoni Ant #4	"	380
Shoshoni Ant #7	"	383
Shoshoni Ant #8	"	386
Shoshoni Ant #9	"	389
Shoshoni Ant #11	"	392
Smilo	"	395
Sweetwater	"	399
Two Mile Hill	"	403
Upper Gov't Draw	"	405
West Pasture	"	409

```
C8 50    JUL 01  RUN14BA...
            2017    BIG     TRAILS G.R.I. AUGUST 7/75    INSIDE SPRAY

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT

  6    *ARTR      4.00 2.00E-01             1
   ANN GRASS     37.70  1.88               19     88.92    4.68   2.36 426.97
  5    BRTE      37.70 1.88E+00 6.12E+01   19
   ANN FORBS     23.90  1.19               13     12.54    0.96   0.52  60.21
  4    DEPI       0.10 T        1.62E-01    1
  4    LAC        2.50 1.25E-01 4.06E+00    2
  4    UNK#1     19.40 9.70E-01 3.15E+01   13
  4    UNK#2      1.90 9.50E-02 3.08E+00    7
     TOTAL              3.28    100.00         1.0146E+02              4.8718E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.         BIG     TRAILS G.R.I. AUGUST 7/75
OCT. 15 TO APR. 15 = 8.07
APR. 15 TO JULY 1  = 4.38
JULY 1 TO SEPT. 1  =  .77
SEPT. 1 TO OCT. 15 = 1.17
SEASON TOTAL       =14.39
LONG TERM AVERAGE  =13.27
```

**No utilization

```
14 30   JUN 29  RUN23AA...
           2017   BIG     TRAILS G.R.I. AUGUST 7/75   OUT    NATIVE

                         NUMBER PLOTS = 20
                           PLOT SIZE 1X1
PLANT  PLANT  TOTAL  AVE.   PERCENT  ABS.   TOTAL  AVE.   WGT./  LBS
CODE   NAME   TRANS  PER-   COMPO-   PLOT   WGT.   WGT.   UNIT   PER
              BASAL  CENT   SITION   FREQ.  GMS/20 /PLOT  BASAL  AC.
              AREA   BASAL           BASE   SQ.FT. OCCUR- AREA
              PER-   AREA            20            RENCES
              CENT

  6   *ARTR    55.00 2.75E+00           1
  6   *JUCS    40.00 2.00E+00           1
   PER GRASS    4.50  0.22              2    23.55  11.77  5.23 113.08
  3   ARLC      4.50 2.25E-01 1.30E+01  2    23.55  11.77  5.23  1.1308E+02
   PER FORBS    6.00  0.30              1     0.21   0.21  0.03   1.01
  2   ZYVE      6.00 3.00E-01 1.73E+01  1
   ANN GRASS   18.70  0.93             20    37.38   1.87  2.00 179.49
  5   BRTE     18.70 9.35E-01 5.39E+01 20
   ANN FORBS    5.50  0.27              9     2.25   0.25  0.41  10.80
  4   DEPI      0.40 2.00E-02 1.15E+00  2
  4   PLPA      0.50 2.50E-02 1.44E+00  2
  4   UNK*1     4.10 2.05E-01 1.18E+01  9
  4   UNK*2     0.50 2.50E-02 1.44E+00  3
     TOTAL           6.48    100.00         6.3390E+01           3.0438E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.       BIG    TRAILS G.R.I. AUGUST 7/75
OCT. 15 TO APR. 15 = 8.07
APR. 15 TO JULY 1  = 4.38
JULY 1 TO SEPT. 1  =  .77
SEPT. 1 TO OCT. 15 = 1.17
SEASON TOTAL       =14.39
LONG TERM AVERAGE  =13.27
```

**No utilization

```
13 48   JUN 29  RUNP2AA...
          1002    BOYSEN EXCL               JULY   21/75  INSIDE NATIVE

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *OPPO      0.20 T                    1
   PER GRASS     68.60  3.43               20      109.82    5.49   1.60 527.32
  3    BOGR      68.20 3.41E+00 6.98E+01  20      109.18    5.46   1.60  5.2425E+02
  3    STCC       0.40 2.00E-02 4.09E-01   1        0.64    0.64   1.60  3.0731E+00
   PER FORBS     28.80  1.44                9       11.38    1.26   0.40  54.64
  2    ASPU       6.50 3.25E-01 6.65E+00   4
  2    MAGR       2.00 1.00E-01 2.05E+00   1
  2    SPCC      20.30 1.01E+00 2.08E+01   9
   ANN FORBS      0.30  0.01                2        0.05    0.02   0.17   0.24
  4    HAGL       0.20 1.00E-02 2.05E-01   2
  4    LARE       0.10 T        1.02E-01   1
     TOTAL             4.89    100.00           1.2125E+02               5.8221E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


  OPPO                                                                12.57
                                                         Shrub Prod.  12.57

                                                               Total 594.78

PRECIPITATION DATA
 RAIN GUAGE NO.          BOYSEN EXCL             JULY   21/75
OCT. 15 TO APR. 15 = 1.03
APR. 15 TO JULY 1  = 4.35
JULY 1 TO SEPT. 1  =  .80
SEPT. 1 TO OCT. 15 =  .31
SEASON TOTAL       = 6.49
LONG TERM AVERAGE  = 4.99
```

**No utilization

```
          1002   BOYSEN EXCL             JULY    21/75  OUT    NATIVE

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
 PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.    TOTAL  AVE.    WGT./  LBS
 CODE   NAME    TRANS  PER-   COMPO-   PLOT    WGT.   WGT.    UNIT   PER
                BASAL  CENT   SITION   FREQ.   GMS/20 /PLOT   BASAL  AC.
                AREA   BASAL           BASE    SQ.FT. OCCUR-  AREA
                PER-   AREA            20             RENCES
                CENT

  6    *ARSP     3.00 1.50E-01          1
  6    *OPPO    28.00 1.40E+00          2
   PER GRASS    35.40  1.77            16      77.92    4.87   2.20 374.15
  3    BOGR     34.20 1.71E+00 5.91E+01 16     76.48    4.78   2.24  3.6723E+02
  3    SPCR      1.20 6.00E-02 2.07E+00 4       1.44    0.36   1.20  6.9144E+00
   PER FORBS    10.50  0.52             6       4.21    0.70   0.40  20.22
  2    ASPU      6.40 3.20E-01 1.11E+01 6
  2    SPCC      4.10 2.05E-01 7.08E+00 3
   ANN FORBS    12.00  0.60             3      16.61    5.54   1.38  79.76
  4    EPAN      0.20 T        3.45E-01 1
  4    FAGL      0.70 3.50E-02 1.21E+00 3
  4    LARE      0.50 2.50E-02 8.64E-01 3
  4    MATA      0.40 2.00E-02 6.91E-01 2
  4    MON      10.00 5.00E-01 1.73E+01 1
  4    SAKA      0.20 T        3.45E-01 1
     TOTAL             4.44    100.00          9.8740E+01             4.7412E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


   OPPO                                                           7.02
                                                     Shrub Prod.  7.02

                                                          Total 481.14


PRECIPITATION DATA
 RAIN GUAGE NO.        BOYSEN EXCL           JULY   21/75
OCT. 15 TO APR. 15 = 1.03
APR. 15 TO JULY 1  = 4.35
JULY 1 TO SEPT. 1  =  .80
SEPT. 1 TO OCT. 15 =  .31
SEASON TOTAL       = 6.49
LONG TERM AVERAGE  = 4.99

 **No utilization
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```
          2007   BUD    KIMBAL EXCL    JULY    17/75  INSIDE NATIVE

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT  PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE   NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
               BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
               AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
               PER-    AREA              20              RENCES
               CENT

  6    *ARTR   241.00 1.20E+01             8
  6    *OPPO    15.00 7.50E-01             2
  6    *PHHO    29.50 1.47E+00             7
   PER GRASS    32.00  1.60               20     76.17    3.81   2.38 365.74
  3    AGSM     18.90 9.45E-01 2.82E+01   20     75.50    3.77   3.99  3.6253E+02
  3    POSE     13.10 6.55E-01 1.96E+01   12      0.67    0.06   0.05  3.2171E+00
   ANN FORBS    35.00  1.75               12     33.19    2.77   0.95 159.37
  4    DEPI      6.00 3.00E-01 8.96E+00    9
  4    LARE      3.80 1.90E-01 5.67E+00   12
  4    LATE      1.60 8.00E-02 2.39E+00    7
  4    LEDE      0.10 T        1.49E-01    1
  4    MATA     22.50 1.12E+00 3.36E+01    9
  4    MONU      0.20 1.00E-02 2.99E-01    2
  4    PLSP      0.80 4.00E-02 1.19E+00    6
     TOTAL             17.62    100.00          1.0936E+02              5.2511E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

     ARTR                                                         151.94
     OPPO                                                          19.05
     PHHO                                                           5.29
                                                    Shrub Prod.   176.28

                                                          Total   701.39

PRECIPITATION DATA
 RAIN GUAGE NO.        BUD    KIMBAL EXCL    JULY    17/75
OCT. 15 TO APR. 15 =  3.00
APR. 15 TO JULY 1  =  5.00
JULY 1 TO SEPT. 1  =  NR
SEPT. 1 TO OCT. 15 =  1.32
SEASON TOTAL       =  9.32
LONG TERM AVERAGE  =  9.33


    **No utilization
```

```
          2007   BUD    KIMBAL EXCL   JULY   17/75  OUT    NATIVE

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT     WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.    GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE     SQ.FT.  OCCUR-  AREA
                PER-    AREA             20               RENCES
                CENT

  6    *ARTR    166.00 8.30E+00             6
  6    *OPPO     12.00 6.00E-01             1
  6    *PHHO      1.00 5.00E-02             2
   PER GRASS     62.50  3.12               16       56.49    3.53    0.90 271.25
  3     AGSM     11.70 5.85E-01 1.18E+01  16       42.59    2.66    3.64   2.0450E+02
  3     POSE     47.80 2.39E+00 4.80E+01  16       11.37    0.71    0.24   5.4595E+01
  3     SIHY      3.00 1.50E-01 3.02E+00   6        2.53    0.42    0.84   1.2148E+01
   ANN GRASS      2.30  0.11                8        2.15    0.27    0.93   10.32
  5     VUOC      2.30 1.15E-01 2.31E+00   8
   ANN FORBS     34.70  1.73               18       26.34    1.46    0.76 126.48
  4     DEPI      1.30 6.50E-02 1.31E+00   5
  4     LARE      2.10 1.05E-01 2.11E+00   9
  4     LATE     10.10 5.05E-01 1.02E+01  17
  4     LEDE      0.70 3.50E-02 7.04E-01   5
  4     MATA      6.50 3.25E-01 6.53E+00   3
  4     PLSP     14.00 7.00E-01 1.41E+01  18
     TOTAL              13.92    100.00          8.4980E+01                   4.0805E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    ARTR                                                              132.95
    OPPO                                                                9.46
    PHHO                                                                1.40
                                                    Shrub Prod.1      143.81

                                                           Total      551.86

PRECIPITATION DATA
 RAIN GUAGE NO.          BUD    KIMBAL EXCL   JULY   17/75
OCT. 15 TO APR. 15 =  3.00
APR. 15 TO JULY 1  =  5.00
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 =  1.32
SEASON TOTAL       =  9.32
LONG TERM AVERAGE  =  9.33

    **No utilization
```

```
          2007   BUD    KIMBAL EXCL   JULY   17/75  INSIDE SPRAY

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6   *OPPO      4.00 2.00E-01             1
   PER GRASS    25.50  1.27               18      95.30    5.29   3.74 457.60
  3    AGSM     19.20 9.60E-01 2.87E+01   18      85.01    4.72   4.43  4.0819E+02
  3    POSE      5.60 2.80E-01 8.38E+00   10       7.06    0.71   1.26  3.3900E+01
  3    STCC      0.70 3.50E-02 1.05E+00    2       3.23    1.61   4.61  1.5509E+01
   ANN GRASS    23.50  1.17               15      98.03    6.54   4.17 470.71
  5    BRTE     18.00 9.00E-01 2.69E+01   14
  5    VUOC      5.50 2.75E-01 8.23E+00   15
   ANN FORBS    17.80  0.89               13      20.54    1.58   1.15  98.63
  4    DEPI      2.60 1.30E-01 3.89E+00   13
  4    LARE      2.20 1.10E-01 3.29E+00   12
  4    LATE      3.40 1.70E-01 5.09E+00   13
  4    LEDE      2.20 1.10E-01 3.29E+00    9
  4    MATA      4.80 2.40E-01 7.19E+00    4
  4    MONU      0.10 T        1.50E-01    1
  4    PLSP      2.50 1.25E-01 3.74E+00   12
    TOTAL             3.54     100.00          2.1387E+02             1.0269E+03

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    OPPO                                                               14.05
    PHHO                                                                3.58
                                                       Shrub Prod.     17.93

                                                            Total 1,044.83

PRECIPITATION DATA
 RAIN GUAGE NO.          BUD    KIMBAL EXCL   JULY   17/75
OCT. 15 TO APR. 15 = 3.00
APR. 15 TO JULY 1  = 5.00
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 = 1.32
SEASON TOTAL       = 9.32
LONG TERM AVERAGE  = 9.33

    **No utilization
```

```
          2007    BUD    KIMBAL EXCL    JULY    17/75  OUT     SPRAY

                                    NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
 PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
 CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                 BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                 AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                 PER-    AREA              20              RENCES
                 CENT

   6   *ARTR     8.00  4.00E-01             1
   PER GRASS    23.80   1.19               18       81.03    4.50   3.40 389.08
   3   AGSM     11.80  5.90E-01 1.70E+01   18       69.56    3.86   5.89  3.3401E+02
   3   POSE     12.00  6.00E-01 1.73E+01   17       11.47    0.67   0.96  5.5075E+01
   ANN GRASS     9.70   0.48               17       22.60    1.33   2.33 108.52
   5   VUOC      9.70  4.85E-01 1.40E+01   17
   ANN FORBS    35.80   1.79               20       97.46    4.87   2.72 467.97
   4   CHAL      0.20  T        2.89E-01    1
   4   DEPI      1.70  8.50E-02 2.45E+00    7
   4   LARE      1.70  8.50E-02 2.45E+00   11
   4   LATE      3.50  1.75E-01 5.05E+00   15
   4   LEDE      0.70  3.50E-02 1.01E+00    3
   4   MATA      1.00  5.00E-02 1.44E+00    1
   4   PLSP     25.80  1.29E+00 3.72E+01   20
   4   UNK       1.20  6.00E-02 1.73E+00    8
     TOTAL              3.86    100.00             2.0109E+02               9.6557E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

 PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

      ARTR                                                                 33.76
      OPPO                                                                  3.06
                                                                          ______
                                                          Shrub Prod.      36.82
                                                                          ______
                                                                Total 1,002.39
                                                                      ========
 PRECIPITATION DATA
  RAIN GUAGE NO.          BUD     KIMBAL EXCL    JULY    17/75
 OCT. 15 TO APR. 15  =  3.00
 APR. 15 TO JULY 1   =  5.00
 JULY 1 TO SEPT. 1   =
 SEPT. 1 TO OCT. 15  =  1.32
 SEASON TOTAL        =  9.32
 LONG TERM AVERAGE   =  9.33

      **No utilization
```

```
15 22   JUL 01  RUNDICA...
          2002   BUFFAL CREEK   EXCL    JULY    17/75  INSIDE NATIVE

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                PER-    AREA              20               RENCES
                CENT

  6     *ARTR   231.00 1.15E+01             11
  6     *PHHO     9.00 4.50E-01              2
   PER GRASS     47.40  2.37                14      91.49    6.53   1.93 439.31
  3     AGSM      4.60 2.30E-01 5.85E+00     9      12.97    1.44   2.82   6.2278E+01
  3     AGSP     37.90 1.89E+00 4.82E+01    14      74.18    5.30   1.96   3.5619E+02
  3     BOGR      0.70 3.50E-02 8.91E-01     2       1.43    0.71   2.04   6.8664E+00
  3     POSE      4.20 2.10E-01 5.34E+00    11       2.91    0.26   0.69   1.3973E+01
   PER FORBS     22.80  1.14                 4       3.95    0.99   0.17   18.97
  2     AST      11.00 5.50E-01 1.40E+01     4
  2     CAS       0.30 1.50E-02 3.82E-01     1
  2     ERPU      1.00 5.00E-02 1.27E+00     1
  2     PHMU      3.50 1.75E-01 4.45E+00     4
  2     SPCO      6.00 3.00E-01 7.63E+00     2
  2     TRDU      1.00 5.00E-02 1.27E+00     1
   ANN GRASS      4.20  0.21                 8       5.75    0.72   1.37   27.61
  5     BRJA      0.10 T        1.27E-01     1
  5     BRTE      4.10 2.05E-01 5.22E+00     8
   ANN FORBS      4.20  0.21                12       2.69    0.22   0.64   12.92
  4     DEPI      2.30 1.15E-01 2.93E+00    12
  4     LEDE      0.80 4.00E-02 1.02E+00     4
  4     PLSP      1.10 5.50E-02 1.40E+00     7
      TOTAL            15.93    100.00          1.0388E+02                 4.9880E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    ARTR                                                          199.04
    OPPO                                                           18.80
    PHHO                                                            4.68
                                                Shrub Prod.       222.52

                                                      Total       721.32

PRECIPITATION DATA
 RAIN GUAGE NO.          BUFFAL CREEK   EXCL    JULY    17/75
OCT. 15 TO APR. 15 =  4.23
APR. 15 TO JULY 1  =  6.84
JULY 1 TO SEPT. 1  =  DAMAGED
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  = 10.41
```

**No utilization

```
14 42   JUN 29  RUNF4AA...
          2002   BUFFAL CREEK  EXCL    JULY    17/75  OUT    NATIVE

                            NUMBER PLOTS = 20
                              PLOT SIZE 1X1
PLANT   PLANT   TOTAL  AVE.   PERCENT   ABS.    TOTAL  AVE.    WGT./   LBS
CODE    NAME    TRANS  PER-   COMPO-    PLOT    WGT.   WGT.    UNIT    PER
                BASAL  CENT   SITION    FREQ.  GMS/20 /PLOT    BASAL   AC.
                AREA   BASAL            BASE   SQ.FT. OCCUR-   AREA
                PER-   AREA             20            RENCES
                CENT

  6    *ARTR   131.00 6.55E+00            9
  6    *OPPO    32.00 1.60E+00            4
  6    *PHHO    14.00 7.00E-01            6
   PER GRASS    31.80  1.59              20      80.70    4.03    2.54 387.50
  3     AGSM    17.00 8.50E-01 1.97E+01  20      62.07    3.10    3.65  2.9804E+02
  3     AGSP     4.80 2.40E-01 5.56E+00   2      10.30    5.15    2.15  4.9457E+01
  3     BOGR     2.50 1.25E-01 2.90E+00   3       2.15    0.72    0.86  1.0324E+01
  3     POSE     7.50 3.75E-01 8.69E+00  17       6.18    0.36    0.82  2.9674E+01
   PER FORBS    37.70  1.88               6       5.91    0.98    0.16  28.38
  2     AST      5.00 2.50E-01 5.79E+00   2
  2     CYMO     2.00 1.00E-01 2.32E+00   1
  2     ERPU     9.00 4.50E-01 1.04E+01   2
  2     SPCC    14.00 7.00E-01 1.62E+01   5
  2     VIO      7.70 3.85E-01 8.92E+00   6
   ANN GRASS     4.80  0.24              12      11.75    0.98    2.45  56.42
  5     BRJA     0.10 T        1.16E-01   1
  5     BRTE     4.70 2.35E-01 5.45E+00  12
   ANN FORBS    12.00  0.60              16      12.98    0.81    1.08  62.33
  4     DEPI     1.10 5.50E-02 1.27E+00   6
  4     LEDE     2.30 1.15E-01 2.67E+00  10
  4     MONU     0.60 3.00E-02 6.95E-01   3
  4     PLSP     7.80 3.90E-01 9.04E+00  16
  4     UNK      0.20 T        2.32E-01   1
     TOTAL             13.16    100.00          1.1134E+02             5.3462E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

     ARTR                                                              149.69
     EULA                                                                4.11
     OPPO                                                                6.51
     PHHO                                                                2.54
                                                        Shrub Prod.    162.85
                                                              Total    697.47

PRECIPITATION DATA
 RAIN GUAGE NO.       BUFFAL CREEK  EXCL    JULY    17/75
OCT. 15 TO APR. 15 = 4.23
APR. 15 TO JULY 1  = 6.84
JULY 1 TO SEPT. 1  = DAMAGED
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  =
15 48    JUL 01   RUNVICA...
            2003   BURNT  WAGON   EXCL    JULY    7/75   INSIDE NATIVE

                            NUMBER OF PLOTS
                    COVER = 200, PRODUCTION = 20
                     PLOT SIZE 1 FT. X 10 FT.
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL    AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.     WGT.     UNIT     PER
                 BASAL   CENT    SITION    FREQ.    GMS/     /PLOT    BASAL    AC.
                 AREA    BASAL             BASE     200      OCCUR-   AREA
                 PER-    AREA              200      SQ.FT.   RENCES
                 CENT

  1  ATNU     2218.7   1.11E+01 8.25E+01116   1416.24   12.21    0.64   6.8003E+02
   PER GRASS     0.4   2.00E-03            3      0.04    0.01    0.10   1.9207E-02
  3  SIHY        0.4   T        1.49E-02   3      0.04    0.01    0.10   1.9207E-02
   PER FORBS  332.10    1.66              40    127.89    3.20    0.39   61.41
  2  ALTE       19.4   9.70E-02 7.21E-01  33
  2  MUDI      299.2   1.50E+00 1.11E+01  40
  2  CECA       13.5   6.75E-02 5.02E-01   9
   ANN FORBS  138.10    0.69             106     22.64    0.21    0.16   10.87
  4  CHEN      128.1   6.40E-01 4.76E+00106
  4  MATA        8.0   4.00E-02 2.97E-01   1
  4  UNK         2.0   T        7.44E-02   4
     TOTAL             13.4     100.00         1.56681E+03               7.52334E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub production observed

```
PRECIPITATION DATA
 RAIN GUAGE NO.          BURNT   WAGON   EXCL    JULY    7/75
OCT. 15 TO APR. 15 =  2.17
APR. 15 TO JULY 1  =  4.73
JULY 1 TO SEPT. 1  =   .43
SEPT. 1 TO OCT. 15 =   .40
SEASON TOTAL       =  7.73
LONG TERM AVERAGE  =  6.08
```

**No utilization

```
16 21    JUL 02  RUNK3CA...
            2003    BURNT  WAGON   EXCL     JULY    7/75    OUT     NATIVE

                              NUMBER OF PLOTS
                        COVER = 200, PRODUCTICN = 20
                         PLCT SIZE 1 FT. X 10 FT.
PLANT   PLANT    TOTAL   AVE.     PERCENT    ABS.     TOTAL   AVE.    WGT./   LBS
CCDE    NAME     TRANS   PER-     COMPC-     PLOT     WGT.    WGT.    UNIT    PER
                 BASAL   CENT     SITICN     FREQ.    GMS/    /PLOT   BASAL   AC.
                 AREA    BASAL               BASE     200     OCCUR-  AREA
                 PER-    AREA                200      SQ.FT.  RENCES
                 CENT

  1  ATNU     1904.4   9.52E+00 6.13E+01 96     979.32   10.20   0.51  4.7024E+02
   PER GRASS     1.4   7.00E-03             10     0.16    0.02   0.11  7.6827E-02
  3  SIHY        1.4   T         4.51E-02 10      0.16    0.02   0.11  7.6827E-02
   PER FORBS 1,153.6    5.77               125   411.79    3.29   0.36 197.73
  2  ALTE      134.8   6.74E-01 4.34E+00111
  2  MUDI      998.3   4.99E+00 3.21E+01125
  2  CECA       20.5   1.02E-01 6.60E-01 20
   ANN FORBS    46.70   0.23               110    12.79    0.12   0.27    6.14
  4  CHEN       41.5   2.07E-01 1.34E+00110
  4  MATA        4.0   2.00E-02 1.29E-01  2
  4  UNK         1.2   T         3.86E-02  4
     TOTAL              15.5     100.00         1.40406E+03              6.74187E+02

      * NOT COMPUTED IN PERCENT COMPOSITICN
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

      OPPO                                                        2.53
                                                 Shrub Prod.      2.53
                                                       Total    676.72

PRECIPITATION DATA
 RAIN GUAGE NC.          BURNT   WAGON   EXCL    JULY    7/75
CCT. 15 TC APR. 15 =  2.17
APR. 15 TC JULY 1  =  4.73
JULY 1 TO SEPT. 1  =   .43
SEPT. 1 TC OCT. 15 =   .40
SEASCN TOTAL       =  7.73
LCNG TERM AVERAGE  =  6.08

      **No utilization
```

```
14 43    JUN 29  RUNT4AA...
           1501    COCHRA EXCL              JULY    24/75  INSIDE NATIVE

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARTR    309.00 1.54E+01             11
   PER GRASS     17.60  0.88                17      37.97    2.23   2.16 182.32
  3    AGSM       7.40 3.70E-01 2.27E+01 17      29.47    1.73   3.98  1.4151E+02
  3    POSE      10.20 5.10E-01 3.13E+01  6       8.50    1.42   0.83  4.0814E+01
   ANN GRASS     13.00  0.65                16      39.52    2.47   3.04 189.76
  5    BRTE      12.30 6.15E-01 3.77E+01 16
  5    VUOC       0.70 3.50E-02 2.15E+00  1
   ANN FORBS      2.00  0.10                 4       0.67    0.17   0.33   3.22
  4    CHEN       1.10 5.50E-02 3.37E+00  4
  4    DEPI       0.30 1.50E-02 9.20E-01  1
  4    LARE       0.30 1.50E-02 9.20E-01  1
  4    LEDE       0.30 1.50E-02 9.20E-01  3
     TOTAL            17.08     100.00          7.8160E+01             3.7530E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    ARTR                                                               449.27
    OPPO                                                                10.95
    PHHO                                                                 7.54
                                                       Shrub Prod.     469.76

                                                             Total     849.06
PRECIPITATION DATA
 RAIN GUAGE NO.        COCHRA EXCL            JULY    24/75
OCT. 15 TO APR. 15 = 2.83
APR. 15 TO JULY 1  = 7.18
JULY 1 TO SEPT. 1  =  NR
SEPT. 1 TO OCT. 15 = 1.68
SEASON TOTAL       =11.69
LONG TERM AVERAGE  =10.14


    **No utilization
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```
14 46    JUN 29  RUNY4AA...
             1501   COCHRA EXCL             JULY    24/75  OUT     NATIVE

                                NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR     87.00  4.35E+00            5
  6    *PHHO      6.00  3.00E-01            2
   PER GRASS     38.80   1.94              20       101.17     5.06   2.61  485.79
  3    AGSM      14.40  7.20E-01 2.46E+01  20        91.47     4.57   6.35   4.3921E+02
  3    POSE      24.40  1.22E+00 4.17E+01  12         9.70     0.81   0.40   4.6576E+01
   PER FORBS      0.50   0.02               2         0.35     0.17   0.70    1.68
  2    SPCC       0.50  2.50E-02 8.55E-01   2
   ANN GRASS     15.80   0.79              20        79.16     3.96   5.01  380.10
  5    BRTE      15.80  7.90E-01 2.70E+01  20
   ANN FORBS      3.40   0.17               6         1.13     0.19   0.33    5.43
  4    CEHN       0.50  2.50E-02 8.55E-01   2
  4    DEPI       0.50  2.50E-02 8.55E-01   3
  4    LARE       0.50  2.50E-02 8.55E-01   3
  4    LEDE       0.70  3.50E-02 1.20E+00   3
  4    PLSP       1.20  6.00E-02 2.05E+00   6
     TOTAL              7.57     100.00            1.8181E+02                8.7300E+02

          * NOT COMPUTED IN PERCENT COMPOSITION
          T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

     ARTR                                                             216.12
     OPPO                                                              15.17
     PHHO                                                              12.12
                                                        Shrub Prod.   243.41

                                                           Total 1,116.41
PRECIPITATION DATA
 RAIN GUAGE NO.       COCHRA EXCL            JULY    24/75
OCT. 15 TO APR. 15 =  2.83
APR. 15 TO JULY 1  =  7.18
JULY 1 TO SEPT. 1  =   NR
SEPT. 1 TO OCT. 15 =  1.68
SEASON TOTAL       = 11.69
LONG TERM AVERAGE  = 10.14

     **No utilization
```

```
14 47   JUN 29  RUN54AA...
           1501   COCHRA EXCL           JULY   24/75  INSIDE PITTED

                             NUMBER PLOTS = 20
                               PLOT SIZE 1X1
PLANT  PLANT  TOTAL  AVE.   PERCENT  ABS.   TOTAL  AVE.   WGT./  LBS
CODE   NAME   TRANS  PER-   COMPO-   PLOT   WGT.   WGT.   UNIT   PER
              BASAL  CENT   SITION   FREQ.  GMS/20 /PLOT  BASAL  AC.
              AREA   BASAL           BASE   SQ.FT. OCCUR- AREA
              PER-   AREA            20            RENCES
              CENT

  6   *ARTR   232.00 1.16E+01           8
  6   *PHHO     8.50 4.25E-01           2
   PER GRASS   27.00  1.35              9   142.13  15.79  5.26 682.46
  3    AGCR    18.70 9.35E-01 2.98E+01  9   118.16  13.13  6.32  5.6737E+02
  3    AGSM     5.30 2.65E-01 8.44E+00  9    22.71   2.52  4.28  1.0905E+02
  3    POSE     2.80 1.40E-01 4.46E+00  4     1.15   0.29  0.41  5.5219E+00
  3    SIHY     0.20 T        3.18E-01  1     0.11   0.11  0.55  5.2819E-01
   PER FORBS   13.50  0.67              2     9.24   4.62  0.68  44.37
  2    CAST    10.00 5.00E-01 1.59E+01  1
  2    CYMO     1.00 5.00E-02 1.59E+00  1
  2    SPCO     2.50 1.25E-01 3.98E+00  2
   ANN GRASS   20.30  1.01             17    83.14   4.89  4.10 399.21
  5    BRTE    17.70 8.85E-01 2.82E+01 17
  5    VUOC     2.60 1.30E-01 4.14E+00  6
   ANN FORBS    2.00  0.10              3     0.54   0.18  0.27   2.59
  4    DEPI     0.90 4.50E-02 1.43E+00  3
  4    LEDI     0.90 4.50E-02 1.43E+00  3
  4    MACA     0.20 T        3.18E-01  1
     TOTAL           15.16    100.00        2.3505E+02          1.1286E+03

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    ARTR                                                     210.79
    OPPO                                                       2.31
                                               Shrub Prod.   213.10
                                                     Total   325.96


PRECIPITATION DATA
 RAIN GUAGE NO.        COCHRA EXCL            JULY   24/75
OCT. 15 TO APR. 15 =  2.83
APR. 15 TO JULY 1  =  7.18
JULY 1 TO SEPT. 1  =   NR
SEPT. 1 TO OCT. 15 =  1.68
SEASON TOTAL       = 11.69
LONG TERM AVERAGE  = 10.14

  **No utilization
```

```
14 49    JUN 29  RUN64AA...
             1501    COCHRA EXCL              JULY    24/75  OUT     SPRAY

                                      NUMBER PLOTS = 20
                                         PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

    PER GRASS     24.60   1.23                  20    117.90     5.89   4.79  566.12
  3    AGSM       16.30  8.15E-01  3.36E+01  20    109.31     5.47   6.71   5.2487E+02
  3    POSE        6.10  3.05E-01  1.26E+01   5      4.57     0.91   0.75   2.1944E+01
  3    STCC        2.20  1.10E-01  4.54E+00   2      4.02     2.01   1.83   1.9303E+01
    ANN GRASS     22.20   1.11                  20    171.39     8.57   7.72  822.96
  5    BRTE       20.30  1.01E+00  4.19E+01  20
  5    VUOC        1.90  9.50E-02  3.92E+00   5
    ANN FORBS      1.70   0.08                   4      0.45     0.11   0.26    2.16
  4    LEDE        1.40  7.00E-02  2.89E+00   4
  4    UNK1        0.30  1.50E-02  6.19E-01   1
      TOTAL               2.42     100.00          2.8974E+02               1.3912E+03

          * NOT COMPUTED IN PERCENT COMPOSITION
          T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

      ARTR                                                                 6.32
      OPPO                                                                 8.00
                                                   Shrub Prod.            13.32
                                                         Total         1,404.52

PRECIPITATION DATA
 RAIN GUAGE NO.           COCHRA EXCL              JULY    24/75
OCT. 15 TO APR. 15 = 2.83
APR. 15 TO JULY 1  = 7.18
JULY 1 TO SEPT. 1  =  NR
SEPT. 1 TO OCT. 15 = 1.68
SEASON TOTAL       =11.69
LONG TERM AVERAGE  =10.14
```

**No utilization

```
08 53    JUL 01  RUNG5BA...
            1901    CUMBER EXCL    NO.  1 AUGUST 11/75   INSIDE NATIVE

                              NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.     PERCENT   ABS.    TOTAL    AVE.     WGT./   LBS
CODE    NAME    TRANS   PER-     COMPO-    PLOT    WGT.     WGT.     UNIT    PER
                BASAL   CENT     SITION    FREQ.   GMS/20   /PLOT    BASAL   AC.
                AREA    BASAL              BASE    SQ.FT.   OCCUR-   AREA
                PER-    AREA               20               RENCES
                CENT

  6    *ARTR   368.00  1.84E+01             12
  6    *CHVI    78.00  3.90E+00              6
  6    *PHHO     2.00  1.00E-01              1
  6    *SAVE     4.00  2.00E-01              1
  1     ATNU    24.00  1.20E+00  4.23E+01    4     13.49     3.37     0.56   6.4775E+01
   PER GRASS    31.50   1.57                20     58.27     2.91     1.85 279.79
  3     AGSM    18.80  9.40E-01  3.32E+01   20     47.21     2.36     2.51   2.2669E+02
  3     POSE    10.00  5.00E-01  1.76E+01   10      5.31     0.53     0.53   2.5497E+01
  3     SIHY     2.70  1.35E-01  4.76E+00    3      5.75     1.92     2.13   2.7610E+01
   PER FORBS     1.20   0.06                 2      0.36     0.18     0.30     1.73
  2     PHLO     0.30  1.50E-02  5.29E-01    2
  2     PHMU     0.60  3.00E-02  1.06E+00    2
  2     TRI      0.30  1.50E-02  5.29E-01    1
     TOTAL             25.43     100.00            7.2120E+01                3.4630E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    ARTR                                                        204.50
    CHVI                                                         34.64
    PHHO                                                         13.73
    SAVE                                                         86.97
    TGSP                                                          3.72

                                                 Shrub Prod.    343.56
                                                       Total    689.86

PRECIPITATION DATA
 RAIN GUAGE NO.        CUMBER EXCL    NO.  1 AUGUST 11/75
OCT. 15 TO APR. 15  =  5.08
APR. 15 TO JULY 1   =  2.30
JULY 1 TO SEPT. 1   =  1.24
SEPT. 1 TO OCT. 15  = E .90
SEASON TOTAL        =  9.52
LONG TERM AVERAGE   =  8.29
```

**No utilization

```
          1901   CUMBER EXCL   NO. 1 AUGUST 11/75  OUT     NATIVE

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT  PLANT    TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.     WGT./   LBS
CODE   NAME     TRANS   PER-    COMPO-   PLOT     WGT.    WGT.     UNIT    PER
                BASAL   CENT    SITION   FREQ.    GMS/20  /PLOT    BASAL   AC.
                AREA    BASAL            BASE     SQ.FT.  OCCUR-   AREA
                PER-    AREA             20               RENCES
                CENT

  6   *ARTR     27.00 1.35E+00             2
  6   *CHVI     95.00 4.75E+00             5
  6   *SAVE     12.00 6.00E-01             1
  6   *TESP     12.00 6.00E-01             1
  1    ATNU     80.00 4.00E+00 7.56E+01    6      44.12    7.35    0.55   2.1185E+02
   PER GRASS    19.00  0.95               17      47.12    2.77    2.48 226.26
  3    AGSM     16.70 8.35E-01 1.58E+01   17      45.99    2.71    2.75   2.2083E+02
  3    POSE      2.30 1.15E-01 2.17E+00    3       1.13    0.38    0.49   5.4259E+00
   PER FORBS     6.60  0.33               14       3.22    0.23    0.49  15.46
  2    PHMU      6.60 3.30E-01 6.24E+00   14
   ANN FORBS     0.20  0.01                1       0.05    0.05    0.25    0.24
  4    LARE      0.20 T        1.89E-01    1
     TOTAL             12.59   100.00             9.4510E+01                4.5381E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE
```

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

ARTR	190.29
CHVI	34.28
EULA	5.48
PHHO	6.02
SAVE	81.17
TESP	10.44
Shrub Prod.	331.68
Total	785.49

PRECIPITATION DATA
RAIN GUAGE NO.   CUMBER EXCL   NO. 1 AUGUST 11/75
OCT. 15 TO APR. 15 = 5.08
APR. 15 TO JULY 1 = 2.30
JULY 1 TO SEPT. 1 = 1.24
SEPT. 1 TO OCT. 15 = E .90
SEASON TOTAL = 9.52
LONG TERM AVERAGE = 8.29

Utilization	55.21
Production Adjusted	840.70

```
15 08    JUN 29  RUNS5AA...
          1901    CUMBER EXCL    NO.   1 AUGUST 11/75   INSIDE SPRAY

                               NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT     WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.    GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE     SQ.FT.  OCCUR-  AREA
                PER-    AREA             20               RENCES
                CENT

  PER GRASS    63.00  3.15                20     257.52  12.88   4.09
 3    AGSM     55.00 2.75E+00 8.47E+01 20     244.80  12.24   4.45   1.1755E+03
 3    POSE      4.00 2.00E-01 6.16E+00  7       2.88   0.41   0.72   1.3829E+01
 3    SIHY      4.00 2.00E-01 6.16E+00  3       9.84   3.28   2.46   4.7249E+01
  ANN FORBS     1.90  0.09                 3       0.98   0.33   0.52    4.71
 4    CHEN      0.10 T          1.54E-01  1
 4    DEPI      1.60 8.00E-02 2.47E+00  3
 4    KOCH      0.20 T          3.08E-01  1
    TOTAL              3.24     100.00          2.5850E+02                1.2412E+03

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

    ARTR                                                               15.79
    CHVI                                                               10.66
                                                   Shrub Prod.         26.45
                                                        Total       1,267.65

PRECIPITATION DATA
 RAIN GUAGE NO.        CUMBER EXCL    NO.  1 AUGUST 11/75
OCT. 15 TO APR. 15 = 5.08
APR. 15 TO JULY 1  = 2.30
JULY 1 TO SEPT. 1  = 1.24
SEPT. 1 TO OCT. 15 = E .90
SEASON TOTAL       = 9.52
LONG TERM AVERAGE  = 8.29
```

**No utilization

```
09 27    JUL 01  RUN258A...
           1901    CUMBER EXCL    NO. 1 AUGUST 11/75  OUT     SPRAY

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-   PLOT     WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION   FREQ.    GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL            BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA             20               RENCES
                 CENT

  6    *CHVI      7.10 3.55E-01             4
  1     ATNU     79.00 3.95E+00 4.22E+01    3      65.67   21.89    0.83   3.1533E+02
   PER GRASS     82.90   4.14              17      72.86    4.29    0.88 349.85
  3     AGSM     34.80 1.74E+00 1.86E+01   17      61.16    3.60    1.76   2.9367E+02
  3     ORHY      0.40 2.00E-02 2.14E-01    1       0.12    0.12    0.30   5.7620E-01
  3     POSE     45.20 2.26E+00 2.41E+01   11       4.46    0.41    0.10   2.1416E+01
  3     SIHY      2.50 1.25E-01 1.33E+00    3       7.12    2.37    2.85   3.4188E+01
   ANN FORBS     25.40   1.27              11      18.32    1.67    0.72   87.97
  4     CHEN     13.00 6.50E-01 6.94E+00    3
  4     KOSC     10.60 5.30E-01 5.66E+00   11
  4     LARE      1.80 9.00E-02 9.61E-01    3
     TOTAL                9.72    100.00          1.5685E+02                 7.5315E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	24.47
CHVI	24.22
SAVE	24.35
Shrub Prod.	73.04
Total	826.19

```
PRECIPITATION DATA
 RAIN GUAGE NO.          CUMBER EXCL     NO.  1 AUGUST 11/75
OCT. 15 TO APR. 15  =  5.08
APR. 15 TO JULY 1   =  2.30
JULY 1 TO SEPT. 1   =  1.24
SEPT. 1 TO OCT. 15  = E .90
SEASON TOTAL        =  9.52
LONG TERM AVERAGE   =  8.29
```

~~Utilization~~	73.41
Production Adjusted	899.60

14 03 JUN [illegible]

1201 CUMBER EXCL NO 2 AUG 12/75 INSIDE NATIVE

NUMBER PLOTS = 20

PLOT SIZE 1X1

PLANT CODE	PLANT NAME	TOTAL TRANS BASAL AREA PERCENT	AVE. PERCENT BASAL AREA	PERCENT COMPOSITION	ABS. PLOT FREQ. BASE 20	TOTAL WGT. GMS/20 SQ.FT.	AVE. WGT. /PLOT OCCURRENCES	WGT./ UNIT BASAL AREA	LBS PER AC.
6	*ARTR								
6	*CHVI								
6	*LEPU								
6	*TECA								
	PER GRASS				20	55.68			267.36
3	AGSM				20	40.63			195.09
3	POFE				5	15.05			72.27
	PER FORBS				19	15.72			75.48
2	AST				4	3.08			14.79
2	PALO				5	.52			2.50
2	CAS				2	3.20			15.36
2	TRI				18	4.62			22.18
2	PHMU				4	.51			2.45
2	ASDI				3	.78			3.75
2	UNK				7	2.93			14.07
2	LILE				1	.08			.38
	TOTAL					71.40			342.84

*NOT COMPUTED IN PERCENT COMPOSITION

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

ARTR	147.56
CHVI	78.37
LEPU	5.11
TECA	4.23
Shrub Prod.	235.27
Total	578.11

PRECIPITATION DATA

RAIN GAUGE NO. CUMBER EXCL NO. 2 AUG 12/75

OCT 15 TO APR 15 = 5.48
APR 15 TO JUL 1 = 1.58
JUL 1 TO SEPT 1 = 1.42
SEPT 1 TO OCT 15 = E .85
SEASON TOTAL = 9.33
LONG TERM AVERAGE = 9.60

```
14 03    JUN 29  RUN12AA...
            1201    CUMBER EXCL    NO 2    AUG     12/75  OUT     NATIVE

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL    AVE.    PERCENT    ABS.      TOTAL   AVE.    WGT./   LBS
CODE    NAME     TRANS    PER-    COMPO-     PLOT      WGT.    WGT.    UNIT    PER
                 BASAL    CENT    SITION     FREQ.     GMS/20  /PLOT   BASAL   AC.
                 AREA     BASAL              BASE      SQ.FT.  OCCUR-  AREA
                 PER-     AREA               20                RENCES
                 CENT

  6    *ARTR    260.50 1.30E+01             14
  6    *CHVI    116.00 5.80E+00             13
  6    *ERMI     29.00 1.45E+00              7
  6    *ERCV      4.50 2.25E-01              2
  6    *PHPU      3.00 1.50E-01              1
   PER GRASS     27.50  1.37                19       31.65    1.67   1.15 151.97
  3    AGSM      13.60 6.80E-01 3.25E+01 19       25.37    1.34   1.87   1.2182E+02
  3    POFE       4.80 2.40E-01 1.15E+01  6        2.73    0.45   0.57   1.3109E+01
  3    POSE       9.10 4.55E-01 2.18E+01 11        3.55    0.32   0.39   1.7046E+01
   PER FORBS     14.00  0.70                16        8.05    0.50   0.57   38.65
  2    AST        0.20 T           4.78E-01  1
  2    ERPU       2.50 1.25E-01 5.98E+00  2
  2    MER        0.50 2.50E-02 1.20E+00  1
  2    PHLC       0.80 4.00E-02 1.91E+00  3
  2    PHMU       2.10 1.05E-01 5.02E+00  6
  2    TRI        7.90 3.95E-01 1.89E+01 16
   ANN FORBS      0.30  0.01                 1        0.07    0.07   0.23    0.34
  4    DEPI       0.30 1.50E-02 7.18E-01  1
     TOTAL             22.74    100.00            3.9770E+01             1.9096E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


   ARTR                                                                  96.82
   CHVI                                                                  58.02
   ERMI                                                                  54.75
   LEPU                                                                   6.01
   TELA                                                                  18.11
                                                     Shrub Prod.        233.71
                                                          Total         424.67

PRECIPITATION DATA
 RAIN GUAGE NO.         CUMBER EXCL    NO 2    AUG     12/75
OCT. 15 TO APR. 15  = 5.48
APR. 15 TO JULY 1   = 1.58
JULY 1 TO SEPT. 1   = 1.42
SEPT. 1 TO OCT. 15  = E .85
SEASON TOTAL        = 9.33
LONG TERM AVERAGE   = 9.60                               Utilization   176.05

                                               Production Adjusted     600.72
```

```
09 32   JUL 01  RUNE68A...
        1201   CUMBER EXCL   NO.2   AUG    12/75  INSIDE SPRAY

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.     WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.     UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT    BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-   AREA
                PER-    AREA             20              RENCES
                CENT

  6    *ERMI     19.00 9.50E-01              2
  PER GRASS      45.70  2.28                20    152.57     7.63   3.34 732.59
  3    AGSM      20.10 1.00E+00 2.82E+01 20     78.99     3.95   3.93  3.7929E+02
  3    POFE      20.00 1.00E+00 2.80E+01 15     70.10     4.67   3.50  3.3660E+02
  3    POSE       5.30 2.65E-01 7.42E+00  6      2.48     0.41   0.47  1.1908E+01
  3    STCC       0.30 1.50E-02 4.20E-01  1      1.00     1.00   3.33  4.8017E+00
  PER FORBS      25.70  1.28                11     29.39     2.67   1.14 141.12
  2    ASDI       0.60 3.00E-02 8.40E-01  2
  2    AST        5.00 2.50E-01 7.00E+00  3
  2    LILE       4.80 2.40E-01 6.72E+00  2
  2    PHLC       0.80 4.00E-02 1.12E+00  2
  2    PHML       2.90 1.45E-01 4.06E+00  4
  2    TRI       11.60 5.80E-01 1.62E+01 11
     TOTAL             4.52    100.00          1.8196E+02              8.7372E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

   CHVI                                                          13.91
   ERMI                                                           5.61
   TECA                                                           6.74
                                                 Shrub Prod.     26.26
                                                       Total    899.98

PRECIPITATION DATA
 RAIN GUAGE NO.        CUMBER EXCL    NO.2    AUG     12/75
OCT. 15 TO APR. 15  =  5.48
APR. 15 TO JULY 1   =  1.58
JULY 1 TO SEPT. 1   =  1.42
SEPT. 1 TO OCT. 15  = E .85
SEASON TOTAL        =  9.33
LONG TERM AVERAGE   =  9.60

   **No utilization
```

```
15 C9    JUN 29  RUN15AA...
            1201    CUMBER EXCL    NO.2    AUG     12/75   OUT      SPRAY

                                     NUMBER PLOTS = 20
                                        PLOT SIZE 1X1
PLANT    PLANT    TOTAL   AVE.    PERCENT    ABS.     TOTAL    AVE.     WGT./    LBS
CODE     NAME     TRANS   PER-    COMPO-     PLOT     WGT.     WGT.     UNIT     PER
                  BASAL   CENT    SITION     FREQ.    GMS/20   /PLOT    BASAL    AC.
                  AREA    BASAL              BASE     SQ.FT.   OCCUR-   AREA
                  PER-    AREA               20                RENCES
                  CENT

  6     *CHVI       8.00  4.00E-01             1
  6     *ERMI      18.00  9.00E-01             7
   PER GRASS       29.10   1.45               20        31.68     1.58     1.09  152.12
  3     AGSM       17.00  8.50E-01  3.39E+01  20        25.35     1.27     1.49   1.2172E+02
  3     POFE        4.10  2.05E-01  8.17E+00   8         4.06     0.51     0.99   1.9495E+01
  3     POSE        8.00  4.00E-01  1.59E+01  10         2.27     0.23     0.28   1.0900E+01
   PER FORBS       18.90   0.94               12         8.17     0.68     0.43   39.23
  2     AGGL        0.20  T         3.98E-01   1
  2     ERPU        0.70  3.50E-02  1.39E+00   1
  2     PHLC        0.70  3.50E-02  1.39E+00   2
  2     PHMU        7.40  3.70E-01  1.47E+01  12
  2     TRI         9.90  4.95E-01  1.97E+01  10
   ANN FORBS        2.20   0.11                2         1.90     0.95     0.86    9.12
  4     CHEN        2.00  1.00E-01  3.98E+00   2
  4     CORA        0.10  T         1.99E-01   1
  4     DEPI        0.10  T         1.99E-01   1
     TOTAL                3.81      100.00            4.1750E+01                  2.0047E+02

         * NOT COMPUTED IN PERCENT COMPOSITION
         T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


  ARTR                                                                          3.40
  CHVI                                                                         18.24
  ERMI                                                                         20.93
  TECA                                                                          3.96
                                                              Shrub Prod.
PRECIPITATION DATA                                                  Total     247.00
 RAIN GUAGE NO.        CUMBER EXCL    NO.2    AUG     12/75
OCT. 15 TO APR. 15 = 5.48
APR. 15 TO JULY 1  = 1.58
JULY 1 TO SEPT. 1  = 1.42
SEPT. 1 TO OCT. 15 =E .85
SEASON TOTAL       = 9.33
LONG TERM AVERAGE  = 9.60



                                                           Utilization    184.55
                                                   Production Adjusted    431.55
```

```
14 03    JUN 29  RUN52AA...
             1202    CUMBER EXCL    NO.3    AUG     13/75  INSIDE NATIVE

                                   NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT  ABS.     TOTAL   AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-   PLOT     WGT.    WGT.     UNIT     PER
                 BASAL   CENT     SITION   FREQ.    GMS/20  /PLOT    BASAL    AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR    149.00 7.45E+00               12
  6    *CHVI     37.00 1.85E+00               10
  6    *ERMI     11.00 5.50E-01                3
  6    *PHHO     39.00 1.95E+00                4
   PER GRASS     36.00   1.80                 12      66.32     5.53     1.84 318.45
  3     AGSM      5.90 2.95E-01 1.20E+01 10      10.48     1.05     1.78   5.0322E+01
  3     AGSP      9.80 4.90E-01 2.00E+01  8      25.06     3.13     2.56   1.2033E+02
  3     POFE      9.30 4.65E-01 1.90E+01  5      24.64     4.93     2.65   1.1831E+02
  3     POSE     10.40 5.20E-01 2.12E+01 12       5.76     0.48     0.55   2.7658E+01
  3     SIHY      0.60 3.00E-02 1.22E+00  1       0.38     0.38     0.63   1.8246E+00
   PER FORBS     10.40   0.52                 10       8.93     0.89     0.86   42.88
  2     CYMO      1.00 5.00E-02 2.04E+00  1
  2     PHLO      2.20 1.10E-01 4.49E+00  6
  2     PHMU      2.80 1.40E-01 5.71E+00  5
  2     TRI       4.40 2.20E-01 8.98E+00 10
   ANN FORBS      2.60   0.13                  5       2.58     0.52     0.99   12.39
  4     CORA      2.60 1.30E-01 5.31E+00  5
     TOTAL             14.25     100.00          7.7830E+01                  3.7372E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


   ARTR                                                                   319.50
   CHVI                                                                    70.15
   ERMI                                                                     5.50
   PHHO                                                                    14.75
   TECA                                                                     4.74
                                                          Shrub Prod.     414.64
                                                                Total     788.36
PRECIPITATION DATA
 RAIN GUAGE NO.        CUMBER EXCL    NO.3    AUG      13/75
OCT. 15 TO APR. 15 = 7.71
APR. 15 TO JULY 1  = 1.78
JULY 1 TO SEPT. 1  = 1.25
SEPT. 1 TO OCT. 15 = E1.20
SEASON TOTAL       = 11.94
LONG TERM AVERAGE  = 11.27


   **No utilization
```

```
      1202   CUMBER EXCL    NO.3    AUG     13/75  OUT      NATIVE

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT


  6    *ARTR    255.00 1.28E+01             13
  6    *CHVI     47.00 2.35E+00              8
  6    *ERMI     29.00 1.45E+00              4
  6    *PHHO     37.00 1.85E+00              4
    PER GRASS    23.60  1.18                15     43.82    2.92   1.86 210.41
  3    AGSM       6.90 3.45E-01 2.02E+01 15     16.23    1.08   2.35  7.7931E+01
  3    AGSP       6.80 3.40E-01 1.99E+01  7     23.39    3.34   3.44  1.1231E+02
  3    POFE       2.80 1.40E-01 8.21E+00  3      1.81    0.60   0.65  8.6911E+00
  3    POSE       7.10 3.55E-01 2.08E+01 12      2.39    0.20   0.34  1.1476E+01
    PER FORBS    10.30  0.51                12      5.23    0.44   0.51  25.11
  2    ASDI       0.90 4.50E-02 2.64E+00  2
  2    PHLC       1.60 8.00E-02 4.69E+00  4
  2    PHMU       5.30 2.65E-01 1.55E+01 12
  2    TRI        2.50 1.25E-01 7.33E+00  9
    ANN FORBS     0.20  0.01                 1      0.08    0.08   0.40   0.38
  4    CORA       0.10 T          2.93E-01  1
  4    DEPI       0.10 T          2.93E-01  1
     TOTAL            20.10     100.00          4.9130E+01             2.3591E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	316.80
CHVI	92.76
ERMI	5.61
PHHO	12.17
TECA	6.66
Shrub Prod.	434.00
Total	669.91

```
PRECIPITATION DATA
 RAIN GUAGE NO.        CUMBER EXCL    NO.3    AUG    13/75
OCT. 15 TO APR. 15 = 7.71
APR. 15 TO JULY 1  = 1.78
JULY 1 TO SEPT. 1  = 1.25
SEPT. 1 TO OCT. 15 = E1.20
SEASON TOTAL       = 11.94
LONG TERM AVERAGE  = 11.27
```

Utilization	225.73
Production Adjusted	895.64

```
          1202   CUMBER EXCL   NO.3   AUG    13/75  INSIDE SPRAY

                                    NUMBER PLOTS = 20
                                       PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT

  6    *CHVI    42.00 2.10E+00                5
  6    *ERMI     8.00 4.00E-01                1
  6    *PHHO     6.00 3.00E-01                1
   PER GRASS    37.90  1.89                  20   170.74    8.54   4.51 819.84
  3    AGSP     32.10 1.60E+00 6.25E+01 20   160.42    8.02   5.00   7.7029E+02
  3    POFE      3.20 1.60E-01 6.23E+00  5     8.85    1.77   2.77   4.2495E+01
  3    POSE      2.60 1.30E-01 5.06E+00  6     1.47    0.24   0.57   7.0585E+00
   PER FORBS    13.50  0.67                  13     7.06    0.54   0.52   33.90
  2    ASDI      0.20 T        3.89E-01  1
  2    CYMO      1.00 5.00E-02 1.95E+00  1
  2    PHLC      2.20 1.10E-01 4.28E+00  5
  2    PHMU      5.00 2.50E-01 9.73E+00 13
  2    TRI       5.10 2.55E-01 9.92E+00 13
     TOTAL             5.37    100.00          1.7780E+02              8.5374E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


   CHVI                                                                 19.48
   ERMI                                                                  4.59
   TECA                                                                  3.13
                                                        Shrub Prod.     27.20
                                                              Total    880.94


PRECIPITATION DATA
 RAIN GUAGE NO.        CUMBER EXCL    NO.3    AUG    13/75
OCT. 15 TO APR. 15 = 7.71
APR. 15 TO JULY 1  = 1.78
JULY 1 TO SEPT. 1  = 1.25
SEPT. 1 TO OCT. 15 = E1.20
SEASON TOTAL       = 11.94
LONG TERM AVERAGE  = 11.27
```

**No utilization

```
         1202   CUMBER EXCL   NO.3   AUG    12/75  OUT    SPRAY

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.    TOTAL  AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT    WGT.   WGT.    UNIT   PER
               BASAL  CENT   SITION   FREQ.   GMS/20 /PLOT   BASAL  AC.
               AREA   BASAL           BASE    SQ.FT. OCCUR-  AREA
               PER-   AREA            20             RENCES
               CENT

  6    *ARHO     4.00 2.00E-01           1
  6    *ARTR    29.00 1.45E+00           2
  6    *CHVI    55.00 2.75E+00           8
  6    *ERMI    23.10 1.15E+00           4
  6    *PHHO    21.00 1.05E+00           4
  6    *TECA     9.00 4.50E-01           1
   PER GRASS    33.10  1.65             12      76.59   6.38   2.31 367.76
  3     AGSM    10.70 5.35E-01 2.81E+01 12      24.78   2.06   2.32  1.1899E+02
  3     AGSP     9.50 4.75E-01 2.49E+01  8      40.75   5.09   4.29  1.9567E+02
  3     POFE     7.90 3.95E-01 2.07E+01  9       9.89   1.10   1.25  4.7489E+01
  3     POSE     5.00 2.50E-01 1.31E+01 11       1.17   0.11   0.23  5.6180E+00
   PER FORBS     5.00  0.25              9       4.08   0.45   0.82  19.59
  2     AST      0.40 2.00E-02 1.05E+00  1
  2     PHLC     0.30 1.50E-02 7.87E-01  1
  2     PHMU     3.20 1.60E-01 8.40E+00  9
  2     TRI      1.10 5.50E-02 2.89E+00  4
     TOTAL            8.96    100.00            8.0670E+01            3.8735E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	42.30
CHVI	17.73
ERMI	2.86
PHHO	1.83
TECA	5.55
Shrub Prod.	70.27
Total	457.62

```
PRECIPITATION DATA
 RAIN GUAGE NO.         CUMBER EXCL   NO.3   AUG    12/75
OCT. 15 TO APR. 15 = 7.71
APR. 15 TO JULY 1  = 1.78
JULY 1 TO SEPT. 1  = 1.25
SEPT. 1 TO OCT. 15 =E1.20
SEASON TOTAL       =11.94
LONG TERM AVERAGE  =11.27
```

Utilization	428.32
Production Adjusted	885.94

```
14 04    JUN 29  RUNA3AA...
           1902    CUMBER EXCL    NO.  4 AUGUST 11/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-   PLOT    WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL            BASE    SQ.FT.  OCCUR-   AREA
                 PER-    AREA             20              RENCES
                 CENT

  6    *ARSP     53.00  2.65E+00              7
  6    *PHHO     10.00  5.00E-01              1
  1     ATNU    158.00  7.90E+00 9.26E+01 12    67.53    5.63    0.43   3.2426E+02
   PER GRASS     12.60   0.63                11    33.04    3.00    2.62 158.65
  3     ORHY      1.00  5.00E-02 5.86E-01  1     2.88    2.88    2.88   1.3829E+01
  3     POSE      0.30  1.50E-02 1.76E-01  1     0.06    0.06    0.20   2.8810E-01
  3     SIHY     11.30  5.65E-01 6.62E+00 11    30.10    2.74    2.66   1.4453E+02
     TOTAL             11.68     100.00         1.0057E+02               4.8291E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS




PRECIPITATION DATA
 RAIN GUAGE NO.         CUMBER EXCL    NO.  4 AUGUST 11/75
OCT. 15 TO APR. 15 =  4.35
APR. 15 TO JULY 1  =  3.30
JULY 1 TO SEPT. 1  =  1.49
SEPT. 1 TO OCT. 15 = E .95
SEASON TOTAL       = 10.04
LONG TERM AVERAGE  =  8.61
```

ARSP	22.53
PHHO	8.30
TESP	5.28
Shrub Prod.	41.39
Total	524.30

**No utilization

```
08 52   JUL 01  RUNA58A...
            1902   CUMBER EXCL   NO.  4 AUGUST 11/75  OUT    NATIVE

                                    NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARSP     28.00 1.40E+00            7
  6    *TESP     40.00 2.00E+00            1
  1     ATNU    380.00 1.90E+01 9.62E+01  15     191.16   12.74   0.50   9.1789E+02
   PER GRASS     15.10  0.75              15      43.08    2.87   2.85 206.86
  3     ORHY      3.00 1.50E-01 7.59E-01   1      10.44   10.44   3.48   5.0130E+01
  3     SIHY     12.10 6.05E-01 3.06E+00  15      32.64    2.18   2.70   1.5673E+02
     TOTAL             23.15    100.00           2.3424E+02              1.1247E+03

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS



PRECIPITATION DATA
 RAIN GUAGE NO.          CUMBER EXCL    NO.  4 AUGUST 11/75
OCT. 15 TO APR. 15  =  4.35
APR. 15 TO JULY 1   =  3.30
JULY 1 TO SEPT. 1   =  1.49
SEPT. 1 TO OCT. 15  = E .95
SEASON TOTAL        = 10.09
LONG TERM AVERAGE   =  8.61

   ARSP                                                          17.58
   TESP                                                           6.03
                                                 Shrub Prod.     23.61
                                                       Total  1,148.30
```

**No utilization

```
08 51   JUL 01  RUN64BA...
          2004   DEMER  EXCL            JULY   22/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL  AVE.    PERCENT  ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME    TRANS  PER-    COMPO-   PLOT     WGT.    WGT.     UNIT    PER
                BASAL  CENT    SITION   FREQ.    GMS/20  /PLOT    BASAL   AC.
                AREA   BASAL            BASE     SQ.FT.  OCCUR-   AREA
                PER-   AREA             20               RENCES
                CENT

  6    *ARTR    228.00 1.14E+01             7
  6    *OPPO     21.00 1.05E+00             3
   PER GRASS     36.80  1.84               14      46.49    3.32    1.26 223.23
  3     AGSM      2.10 1.05E-01 4.00E+00   7       9.83    1.40    4.68  4.7201E+01
  3     BOGR     30.00 1.50E+00 5.71E+01  14      33.02    2.36    1.10  1.5855E+02
  3     POSE      4.20 2.10E-01 8.00E+00   7       2.85    0.41    0.68  1.3685E+01
  3     SIHY      0.50 2.50E-02 9.52E-01   1       0.79    0.79    1.58  3.7933E+00
   PER FORBS      3.00  0.15                1       0.80    0.80    0.27   3.84
  2     AST       3.00 1.50E-01 5.71E+00   1
   ANN GRASS      6.70  0.33               10      26.65    2.66    3.98 127.97
  5     BRTE      6.10 3.05E-01 1.16E+01  10
  5     VUOC      0.60 3.00E-02 1.14E+00   4
   ANN FORBS      6.00  0.30                8       5.97    0.75    0.99  28.67
  4     CEPI      1.50 7.50E-02 2.86E+00   5
  4     GIPU      0.50 2.50E-02 9.52E-01   2
  4     LARE      1.20 6.00E-02 2.29E+00   8
  4     LEDE      1.40 7.00E-02 2.67E+00   3
  4     MCNU      0.20 1.00E-02 3.81E-01   2
  4     PLSP      0.90 4.50E-02 1.71E+00   6
  4     SILI      0.30 1.50E-02 5.71E-01   1
     TOTAL             15.07    100.00           7.9910E+01              3.8370E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

   ARTR                                                                  251.26
   OPPO                                                                   16.47
                                                          Shrub Prod.    267.73
                                                                Total    651.45

PRECIPITATION DATA
 RAIN GUAGE NO.         DEMER  EXCL           JULY   22/75
OCT. 15 TO APR. 15 =  2.23
APR. 15 TO JULY 1  =  5.11
JULY 1 TO SEPT. 1  =   NR
SEPT. 1 TO OCT. 15 =  3.26
SEASON TOTAL       = 10.60
LONG TERM AVERAGE  =  8.11

   **No utilization
```

```
15 26    JUN 29  RUNI6AA...
           2004    DEMER  EXCL             JULY    22/75  OUT     NATIVE

                                 NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT  PLANT   TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.    WGT./   LBS
CCDE   NAME    TRANS   PER-    COMPC-   PLOT     WGT.    WGT.    UNIT    PER
               BASAL   CENT    SITICN   FREQ.    GMS/20  /PLOT   BASAL   AC.
               AREA    BASAL            BASE     SQ.FT.  OCCUR-  AREA
               PER-    AREA             20               RENCES
               CENT

  6    *ARTR   215.00 1.08E+01             8
  6    *OPPO    44.00 2.20E+00             4
   PER GRASS    21.50  1.07               16       51.37    3.21    2.39 246.66
  3    AGSM      9.90 4.95E-01 3.18E+01   16       34.96    2.18    3.53  1.6787E+02
  3    BOGR      8.10 4.05E-01 2.60E+01    7       12.71    1.82    1.57  6.1030E+01
  3    POSE      2.90 1.45E-01 9.32E+00    8        2.60    0.32    0.90  1.2484E+01
  3    SIHY      0.60 3.00E-02 1.93E+00    2        1.10    0.55    1.83  5.2819E+00
   ANN GRASS     6.60  0.33                8       23.14    2.89    3.51 111.11
  5    BRTE      4.20 2.10E-01 1.35E+01    8
  5    VUOC      2.40 1.20E-01 7.72E+00    7
   ANN FORBS     3.00  0.15                7        1.84    0.26    0.61   8.84
  4    DEPI      1.20 6.00E-02 3.86E+00    7
  4    LARE      0.20 1.00E-02 6.43E-01    2
  4    LEDE      0.20 1.00E-02 6.43E-01    2
  4    MCNU      0.80 4.00E-02 2.57E+00    5
  4    PLSP      0.20 T        6.43E-01    1
  4    SAKA      0.10 T        3.22E-01    1
  4    SILI      0.30 1.50E-02 9.65E-01    1
      TCTAL          14.50    100.00          7.6350E+01               3.6661E+02

        * NOT COMPUTED IN PERCENT COMPOSITICN
        T - TRACE

PRCDUCTION ESTIMATES CF SHRUBS ANC WOODY MAT FORM PLANTS


   ARTR                                                                  222.12
   OPPO                                                                   13.94
                                                          Shrub Prod.    235.61
                                                                Total    602.22

PRECIPITATION DATA
 RAIN GUAGE NO.        DEMER  EXCL            JULY   22/75
CCT. 15 TC APR. 15 =  2.23
APR. 15 TC JULY 1  =  5.11
JULY 1 TO SEPT. 1  =   NR
SEPT. 1 TC OCT. 15 =  3.26
SEASCN TOTAL       = 10.60
LCNG TERM AVERAGE  =  8.11

   **No utilization
```

```
14 08    JUN 29  RUND3AA...
       2005    DUTCH  NICK    FLATS   JULY    16/75  INSIDE NATIVE

                          NUMBER PLOTS = 20
                            PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.    TOTAL    AVE.    WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT    WGT.     WGT.    UNIT    PER
                 BASAL   CENT    SITION    FREQ.   GMS/20   /PLOT   BASAL   AC.
                 AREA    BASAL             BASE    SQ.FT.   OCCUR-  AREA
                 PER-    AREA              20               RENCES
                 CENT

  6   *OPPO     146.00 7.30E+00             13
   PER GRASS    115.40  5.77                20    144.08     7.20   1.25 691.83
  3    BOGR     113.00 5.65E+00 9.11E+01  20    142.49     7.12   1.26   6.8419E+02
  3    POSE       2.40 1.20E-01 1.93E+00   2      1.59     0.79   0.66   7.6347E+00
   ANN FORBS      8.70  0.43                10      7.95     0.79   0.91   38.17
  4    CHEN       0.10 T        8.06E-02   1
  4    GIPU       0.60 3.00E-02 4.83E-01   5
  4    LATE       0.50 2.50E-02 4.03E-01   2
  4    LEDE       0.50 2.50E-02 4.03E-01   2
  4    LUPU       5.10 2.55E-01 4.11E+00   2
  4    MONU       1.40 7.00E-02 1.13E+00  10
  4    PLPA       0.50 2.50E-02 4.03E-01   3
     TOTAL             13.50    100.00          1.5203E+02                7.3000E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


   OPPO                                                                 35.30
                                                          Shrub Prod.   35.30
                                                                Total  765.30


PRECIPITATION DATA
 RAIN GUAGE NO.        DUTCH  NICK    FLATS  JULY    16/75
OCT. 15 TO APR. 15 = 2.32
APR. 15 TO JULY 1  = 4.71
JULY 1 TO SEPT. 1  = 1.08
SEPT. 1 TO OCT. 15 =  .27
SEASON TOTAL       = 8.38
LONG TERM AVERAGE  = 6.85
```

**No utilization

```
08 51   JUL 01  RUN548A...
        2005   DUTCH  NICK   FLATS  JULY   16/74  OUT    NATIVE

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.   TOTAL   AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-    COMPO-   PLOT   WGT.    WGT.    UNIT   PER
               BASAL  CENT    SITION   FREQ.  GMS/20  /PLOT   BASAL  AC.
               AREA   BASAL            BASE   SQ.FT.  OCCUR-  AREA
               PER-   AREA             20             RENCES
               CENT

  6   *OPPO    75.00 3.75E+00           8
   PER GRASS  103.20  5.16             20    136.99    6.85   1.33 657.78
  3    BOGR   102.50 5.13E+00 9.26E+01 20    136.37    6.82   1.33  6.5481E+02
  3    POSE     0.70 3.50E-02 6.32E-01  2      0.62    0.31   0.89  2.9770E+00
   ANN FORBS    7.50  0.37              6      4.14    0.69   0.55  19.88
  4    ASGE     2.20 1.10E-01 1.99E+00  3
  4    GIPL     0.30 1.50E-02 2.71E-01  2
  4    LATE     0.40 2.00E-02 3.61E-01  3
  4    LEDE     0.20 T        1.81E-01  1
  4    LUPU     3.00 1.50E-01 2.71E+00  1
  4    MONU     0.50 2.50E-02 4.52E-01  5
  4    PLPA     0.90 4.50E-02 8.13E-01  6
     TOTAL           9.28    100.00          1.4113E+02              6.7766E+02

          * NOT COMPUTED IN PERCENT COMPOSITION
          T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

OPPO 76.42

Shrub Prod. 76.42

Total 754.08

```
PRECIPITATION DATA
 RAIN GUAGE NO.        DUTCH  NICK   FLATS  JULY   16/74
OCT. 15 TO APR. 15 = 2.32
APR. 15 TO JULY 1  = 4.71
JULY 1 TO SEPT. 1  = 1.08
SEPT. 1 TO OCT. 15 =  .27
SEASON TOTAL       = 8.38
LONG TERM AVERAGE  = 6.85
```

**No utilization

```
14 14    JUN 29  RUNI3AA...
           0404    FARSON EXCL              AUG     13/75  INSIDE NATIVE

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT

  6     *ARTR   175.00 8.75E+00           10
  6     *ATCO     3.00 1.50E-01            1
  6     *CHVI    25.00 1.25E+00            3
  6     *ERCV    10.00 5.00E-01            1
  6     *PHHO    62.00 3.10E+00           10
   PER GRASS     17.20  0.86              17      24.64    1.45    1.43 118.31
  3      AGSM     8.00 4.00E-01 4.10E+01 17       11.71    0.69    1.46  5.6228E+01
  3      CAEL     1.30 6.50E-02 6.67E+00  2        0.77    0.38    0.59  3.6973E+00
  3      ORHY     6.60 3.30E-01 3.38E+01  8       10.54    1.32    1.60  5.0610E+01
  3      POSE     0.30 1.50E-02 1.54E+00  1        0.32    0.32    1.07  1.5365E+00
  3      SIHY     1.00 5.00E-02 5.13E+00  2        1.30    0.65    1.30  6.2422E+00
   PER FORBS      1.00  0.05               1        0.01    0.01    0.01   0.05
  2      ALTE     1.00 5.00E-02 5.13E+00  1
   ANN FORBS      1.30  0.06               5        0.50    0.10    0.38   2.40
  4      CHEN     0.80 4.00E-02 4.10E+00  5
  4      UNK      0.50 2.50E-02 2.56E+00  3
      TOTAL             14.72   100.00            2.5150E+01             1.2076E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


   ARHO                                                                   3.58
   ARTR                                                                 345.07
   CHVI                                                                  19.04
   EULA                                                                   1.69
   PHHO                                                                  47.90
                                                          Shrub Prod.   417.28
                                                                Total   538.04


PRECIPITATION DATA
 RAIN GUAGE NO.        FARSON EXCL              AUG    13/75
OCT. 15 TO APR. 15 =    RI
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  =  6.52


   **No utilization
```

```
         0404   FARSON EXCL           AUG    13/75  OUT    NATIVE

                             NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT  PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CCDE   NAME    TRANS   PER-    COMPC-   PLOT    WGT.    WGT.    UNIT    PER
               BASAL   CENT    SITICN   FREQ.   GMS/20  /PLOT   BASAL   AC.
               AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
               PER-    AREA             20              RENCES
               CENT

  6   *ARTR   147.00 7.35E+00            9
  6   *CHVI    49.00 2.45E+00            4
  6   *PHHO    42.00 2.10E+00            8
   PER GRASS   16.30  0.81              15      15.97    1.06   0.98   76.68
  3    AGSM     7.50 3.75E-01 3.79E+01  15       6.47    0.43   0.86   3.1067E+01
  3    CAEL     0.60 3.00E-02 3.03E+00   2       0.20    0.10   0.33   9.6034E-01
  3    ORHY     5.30 2.65E-01 2.68E+01   7       7.22    1.03   1.36   3.4668E+01
  3    POSE     0.20 T        1.01E+00   1       0.10    0.10   0.50   4.8017E-01
  3    SIHY     2.10 1.05E-01 1.06E+01   5       1.51    0.30   0.72   7.2506E+00
  3    STCC     0.60 3.00E-02 3.03E+00   1       0.47    0.47   0.78   2.2568E+00
   PER FORBS    1.00  0.05               1       0.01    0.01   0.01    0.05
  2    ALTE     1.00 5.00E-02 5.05E+00   1
   ANN FORBS    2.50  0.12              10       0.82    0.08   0.33    3.94
  4    CHEN     2.30 1.15E-01 1.16E+01  10
  4    UNK      0.20 1.00E-02 1.01E+00   2
     TOTAL          12.89    100.00         1.6800E+01             8.0668E+01

       * NOT COMPUTED IN PERCENT COMPOSITICN
       T = TRACE

PRODUCTION ESTIMATES CF SHRUBS AND WOODY MAT FORM PLANTS


   ARHO                                                               12.34
   ARTR                                                              267.03
   CHVI                                                               42.76
   EULA                                                                1.89
   PHHO                                                               24.28
                                                        Shrub Prod.  348.30
PRECIPITATION DATA                                            Total  428.97
 RAIN GUAGE NO.       FARSON EXCL           AUG    13/75
OCT. 15 TC APR. 15 =   RI
APR. 15 TC JULY 1  =
JULY 1 TO SEPT. 1  =
SEPT. 1 TC OCT. 15 =
SEASCN TOTAL       =
LCNG TERM AVERAGE  = 6.52

   **No utilization
```

```
14 16    JUN 29  RUNJ3AA...
           1007    GRANIT MOUNT   EXCL    AUGLST 15/75  INSIDE NATIVE

                                   NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.    WGT./   LBS
CCDE    NAME    TRANS   PER-    COMPC-   PLOT     WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITICN   FREQ.    GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE     SQ.FT.  OCCUR-  AREA
                PER-    AREA             20               RENCES
                CENT

  6    *ARTR   151.00 7.55E+00              10
  6    *CHVI     5.00 2.50E-01               1
  6    *PHHO    24.00 1.20E+00               4
   PER GRASS    29.00  1.45                 17      69.60    4.09   2.40 334.20
  3    AGSM      6.10 3.05E-01 1.48E+01  9      31.43    3.49   5.15  1.5092E+02
  3    POFE     19.40 9.70E-01 4.70E+01 17      36.55    2.15   1.88  1.7550E+02
  3    POSE      3.50 1.75E-01 8.47E+00  8       1.62    0.20   0.46  7.7787E+00
   PER FORBS    12.30  0.61                  7       8.15    1.16   0.66  39.13
  2    AGGL      2.30 1.15E-01 5.57E+00  3
  2    ALTE      0.50 2.50E-02 1.21E+00  1
  2    AST       3.30 1.65E-01 7.99E+00  3
  2    CAST      0.20 T        4.84E-01  1
  2    ERPU      3.00 1.50E-01 7.26E+00  5
  2    TRI       3.00 1.50E-01 7.26E+00  7
     TOTAL           11.06    100.00          7.7750E+01              3.7333E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

   ARTR                                                         947.12
   CHVI                                                           4.33
   PHHO                                                          11.92
                                                   Shrub Prod.  263.37
                                                         Total  636.70


PRECIPITATION DATA
 RAIN GUAGE NC.        GRANIT MCUNT   EXCL    ALGUST 15/75
OCT. 15 TC APR. 15 =  SI
APR. 15 TC JULY 1  = 7.72
JULY 1 TC SEPT. 1  = 1.42
SEPT. 1 TC OCT. 15 =  .80
SEASCN TOTAL       = 9.94
LCNG TERM AVERAGE  = 8.80

   **No utilization
```

```
        1007   GRANIT MOUNT   EXCL   AUGUST 15/75  OUT    NATIVE

                                   NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.   TOTAL  AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-    COMPO-   PLOT   WGT.   WGT.    UNIT   PER
               BASAL  CENT    SITION   FREQ.  GMS/20 /PLOT   BASAL  AC.
               AREA   BASAL            BASE   SQ.FT. OCCUR-  AREA
               PER-   AREA             20            RENCES
               CENT

  6   *ARTR   209.00 1.04E+01            12
  6   *PHHO    49.50 2.47E+00             8
   PER GRASS   42.80  2.14               19      71.13   3.74  1.66 341.54
  3    AGSM    12.20 6.10E-01 2.47E+01 18      37.53   2.08  3.08  1.8021E+02
  3    POFE    24.30 1.21E+00 4.93E+01 19      26.80   1.41  1.10  1.2869E+02
  3    POSE     4.70 2.35E-01 9.53E+00 10       2.98   0.30  0.63  1.4309E+01
  3    SIHY     1.60 8.00E-02 3.25E+00  4       3.82   0.95  2.39  1.8342E+01
   PER FORBS    6.50  0.32                6       4.80   0.80  0.74  23.05
  2    AST      3.20 1.60E-01 6.49E+00  5
  2    ERPU     3.30 1.65E-01 6.69E+00  6
     TOTAL           15.39    100.00          7.5930E+01               3.6459E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	149.21
CHVI	3.55
PHHO	9.72
Shrub Prod. Total	162.48

```
PRECIPITATION DATA
 RAIN GUAGE NO.        GRANIT MOUNT   EXCL    AUGUST 15/75
OCT. 15 TO APR. 15 =  SI
APR. 15 TO JULY 1  = 7.72
JULY 1 TO SEPT. 1  = 1.42
SEPT. 1 TO OCT. 15 =  .80
SEASON TOTAL       = 9.94
LONG TERM AVERAGE  = 8.80
```

Utilization	359.09
Production Adjusted	995.79

```
        1007   GRANIT MOUNT  EXCL   AUGLST 15/75  INSIDE SPRAY

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT  PLANT   TOTAL   AVE.    PERCENT  ABS.   TOTAL   AVE.    WGT./   LBS
CCDE   NAME    TRANS   PER-    COMPO-   PLOT   WGT.    WGT.    UNIT    PER
               BASAL   CENT    SITION   FREQ.  GMS/20  /PLOT   BASAL   AC.
               AREA    BASAL            BASE   SQ.FT.  OCCUR-  AREA
               PER-    AREA             20             RENCES
               CENT

  6    *ARTR   107.00  5.35E+00             6
  6    *CHVI    33.00  1.65E+00             2
  6    *PHHO    45.00  2.25E+00             5
   PER GRASS    44.20   2.21               20      94.31    4.72    2.13  452.85
  3     AGSM    14.10  7.05E-01  2.90E+01  20      35.67    1.78    2.53   1.7128E+02
  3     POFE    29.10  1.45E+00  5.98E+01  18      58.10    3.23    2.00   2.7898E+02
  3     POSE     1.00  5.00E-02  2.05E+00   3       0.54    0.18    0.54   2.5929E+00
   PER FORBS     4.50   0.22                5       5.53    1.11    1.23   26.55
  2     AST      2.20  1.10E-01  4.52E+00   2
  2     ERPU     1.30  6.50E-02  2.67E+00   3
  2     TRI      1.00  5.00E-02  2.05E+00   5
     TOTAL              11.68     100.00          9.9840E+01             4.7940E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE
```

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

ARTR		61.57
CHVI		6.57
PHHO		5.63
	Shrub Prod.	73.77
	Total	553.17

```
PRECIPITATION DATA
 RAIN GUAGE NO.        GRANIT MOUNT  EXCL    AUGUST 15/75
OCT. 15 TO APR. 15 =   SI
APR. 15 TO JULY 1  =  7.72
JULY 1 TO SEPT. 1  =  1.42
SEPT. 1 TO OCT. 15 =   .80
SEASON TOTAL       =  9.94
LONG TERM AVERAGE  =  8.80
```

**No utilization

```
        1007   GRANIT MOUNT   EXCL   AUGUST 15/75  OUT    SPRAY

                             NUMBER PLOTS = 20
                               PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.   TOTAL   AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT   WGT.    WGT.    UNIT   PER
               BASAL  CENT   SITION   FREQ.  GMS/20  /PLOT   BASAL  AC.
               AREA   BASAL           BASE   SQ.FT.  OCCUR-  AREA
               PER-   AREA            20             RENCES
               CENT

  6    *ARTR   384.00 1.92E+01          13
  6    *CHVI    66.00 3.30E+00           3
  6    *PHHO    83.00 4.15E+00           7
   PER GRASS    34.40  1.72             19     50.62   2.66   1.47 243.06
  3    AGSM      9.70 4.85E-01 2.02E+01 19     24.04   1.27   2.48  1.1543E+02
  3    POFE     20.40 1.02E+00 4.24E+01 15     24.03   1.60   1.18  1.1538E+02
  3    POSE      3.40 1.70E-01 7.07E+00  7      1.77   0.25   0.52  8.4990E+00
  3    SIHY      0.90 4.50E-02 1.87E+00  3      0.78   0.26   0.87  3.7453E+00
   PER FORBS    13.70  0.68             11     16.08   1.46   1.17  77.21
  2    AST      12.30 6.15E-01 2.56E+01 11
  2    ERPU      0.80 4.00E-02 1.66E+00  2
  2    TRI       0.60 3.00E-02 1.25E+00  3
     TOTAL             29.05   100.00         6.6700E+01            3.2027E+02

     * NOT COMPUTED IN PERCENT COMPOSITION
     T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


  ARTR                                                            76.97
  CHVI                                                             7.79
  PHHO                                                            14.90
                                                   Shrub Prod.    99.66
                                                         Total   419.93

PRECIPITATION DATA
 RAIN GUAGE NO.        GRANIT MOUNT  EXCL   AUGUST 15/75
OCT. 15 TO APR. 15 =  SI
APR. 15 TO JULY 1  = 7.72
JULY 1 TO SEPT. 1  = 1.42
SEPT. 1 TO OCT. 15 =  .80
SEASON TOTAL       = 9.94
LONG TERM AVERAGE  = 8.80
```

**No utilization

```
16 12    JUL 01  RUNNJCA...
            0901   FALOGE PASTUR EXCL 1 JULY    9/75   INSIDE NATIVE

                             NUMBER OF PLOTS
                     COVER = 200, PRODUCTION = 20
                      PLOT SIZE 1 FT. X 10 FT.
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL    AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.     WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/     /PLOT   BASAL   AC.
                AREA    BASAL            BASE    200      OCCUR-  AREA
                PER-    AREA             200     SQ.FT.   RENCES
                CENT

  6   *ARPE     17.0  8.50E-02               3
  6   *ARTR      0.1  T                      1
  6   *CPPC     87.0  4.35E-01               5
  6   *TESP      5.0  2.50E-02               2
  1   ATNU    2310.1  1.16E+01 9.57E+01150  1257.57    8.38   0.54   6.0385E+02
   PER GRASS    39.3  1.96E-01              21    55.39    2.64   1.41   2.6597E+01
  3   POSE      13.8  6.90E-02 5.72E-01  8     8.31    1.04   0.60   3.9902E+00
  3   SIHY      25.5  1.27E-01 1.06E+00 21    47.08    2.24   1.85   2.2606E+01
   PER FORBS    40.90  0.20                 27    11.52    0.43   0.28    5.53
  2   ALTE      26.9  1.34E-01 1.11E+00 27
  2   AST        0.5  T        2.07E-02  1
  2   MACA       7.5  3.75E-02 3.11E-01  5
  2   MUDI       6.0  3.00E-02 2.49E-01  2
   ANN FORBS    22.80  0.11                 39     9.08    0.23   0.40    4.36
  4   CEPI       0.5  T        2.07E-02  4
  4   GIPU       7.6  3.80E-02 3.15E-01 30
  4   LARE       9.3  4.65E-02 3.85E-01 39
  4   LEDE       0.6  T        2.49E-02  6
  4   MATA       0.2  T        T         1
  4   CECO       0.9  T        3.73E-02  4
  4   SED        0.5  T        2.07E-02  4
  4   UNK        3.2  1.60E-02 1.33E-01 21
      TOTAL            12.6     100.00        1.33356E+03            6.40335E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


    OPPO                                                               12.75
                                                         Shrub Prod.   12.75
                                                               Total  653.09


PRECIPITATION DATA
 RAIN GUAGE NO.        FALOGE PASTUR EXCL 1 JULY     9/75
OCT. 15 TO APR. 15 = 1.49
APR. 15 TO JULY 1  = 2.81
JULY 1 TO SEPT. 1  =  .70
SEPT. 1 TO OCT. 15 = 1.01
SEASON TOTAL       = 6.01
LONG TERM AVERAGE  = 5.42

  **No utilization
```

```
16 13   JUL 02  RUNPJCA...
            0905   HALOGE PASTUR EXCL 2 JULY   9/75   INSIDE NATIVE

                                     NUMBER OF PLOTS
                           COVER = 200, PRODUCTION = 20
                              PLOT SIZE 1 FT. X 10 FT.
PLANT  PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL    AVE.    WGT./    LBS
CODE   NAME    TRANS   PER-    COMPO-    PLOT    WGT.     WGT.    UNIT     PER
               BASAL   CENT    SITION    FREQ.   GMS/     /PLOT   BASAL    AC.
               AREA    BASAL             BASE    200      OCCUR-  AREA
               PER-    AREA              200     SQ.FT.   RENCES
               CENT

  6   *ARPE      5.0   2.50E-02                2
  6   *OPPC     37.0   1.85E-01                7
  1   ATNU    1183.3   5.92E+00 6.30E+01150    930.12    6.20    0.79   4.4662E+02
   PER GRASS   586.7   2.93E+00              123    807.97    6.57    1.38   3.8796E+02
  3   AGCR       3.1   1.55E-02 1.65E-01  2      7.16    3.58    2.31   3.4380E+00
  3   POSE      42.4   2.12E-01 2.26E+00 35     10.63    0.30    0.25   5.1042E+00
  3   SIHY     541.2   2.71E+00 2.88E+01123    790.18    6.42    1.46   3.7942E+02
   PER FORBS   55.10   0.28                 24      5.81    0.24    0.11    2.79
  2   ALTE      55.0   2.75E-01 2.93E+00 24
  2   SED        0.1   T        T         1
   ANN FORBS   53.50   0.27                 92     23.76    0.26    0.44   11.41
  4   ARHC2      0.1   T        T         1
  4   CEPI       1.3   T        6.92E-02  9
  4   GIPU       0.4   T        2.13E-02  2
  4   LARE       5.8   2.90E-02 3.09E-01 23
  4   LEDE       3.6   1.80E-02 1.92E-01 17
  4   MATA      36.0   1.80E-01 1.92E+00 92
  4   UNK1       2.6   1.30E-02 1.38E-01 10
  4   UNK2       3.7   1.85E-02 1.97E-01  9
      TOTAL            9.6      100.00         1.76766E+03             8.48776E+02

         * NOT COMPUTED IN PERCENT COMPOSITION
         T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

         ARSP                                                            2.71
         OPPO                                                            7.60
                                                  Shrub Prod.           10.31
                                                        Total          859.09

PRECIPITATION DATA
 RAIN GUAGE NO.        HALOGE PASTUR EXCL 2 JULY   9/75
OCT. 15 TO APR. 15 = 1.89
APR. 15 TO JULY 1  = 3.09
JULY 1 TO SEPT. 1  =  .71
SEPT. 1 TO OCT. 15 = 1.22
SEASON TOTAL       = 6.91
LONG TERM AVERAGE  = 6.07

         **No utilization
```

```
16 20    JUL 02  RUNI3CA...
           0903    HALOGE PASTUR EXCL 3 JULY    9/75    INSIDE NATIVE

                                NUMBER OF PLOTS
                        COVER = 200, PRODUCTION = 20
                         PLOT SIZE 1 FT. X 10 FT.
PLANT    PLANT    TOTAL   AVE.    PERCENT   ABS.    TOTAL    AVE.     WGT./    LBS
CODE     NAME     TRANS   PER-    COMPO-    PLOT    WGT.     WGT.     UNIT     PER
                  BASAL   CENT    SITION    FREQ.   GMS/     /PLOT    BASAL    AC.
                  AREA    BASAL             BASE    200      OCCUR-   AREA
                  PER-    AREA              200     SQ.FT.   RENCES
                  CENT

  6   *ARPE        1.1    T                   2
  6   *OPPC       12.0    6.00E-02            2
  1   ATNU      1803.3    9.02E+00 8.66E+01136    837.87     6.16     0.46    4.0232E+02
   PER GRASS   186.7    9.33E-01             81    422.17     5.21     2.26    2.0271E+02
  3   POSE         1.8    T        8.65E-02   2      0.90     0.45     0.50    4.3215E-01
  3   SIHY       184.9    9.24E-01 8.88E+00  81    421.27     5.20     2.28    2.0228E+02
   PER FORBS    39.60   0.20                 34      9.34     0.27     0.24      4.48
  2   ALTE        39.1    1.95E-01 1.88E+00  34
  2   MACA         0.5    T        2.40E-02   1
   ANN FORBS    52.40   0.26                 50     20.66     0.41     0.39      9.92
  4   GIPU        21.3    1.06E-01 1.02E+00  31
  4   LARE        16.9    8.45E-02 8.12E-01  50
  4   LEDE         0.2    T        T          2
  4   MATA         5.8    2.90E-02 2.79E-01  21
  4   SED          0.5    T        2.40E-02   3
  4   UNK1         5.2    2.60E-02 2.50E-01  27
  4   UNK2         2.5    1.25E-02 1.20E-01  11
      TOTAL              10.5      100.00          1.29004E+03                6.19438E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        OPPO                                                               6.76
                                                              Shrub Prod.  6.76
                                                                   Total  626.20


PRECIPITATION DATA
 RAIN GUAGE NO.          HALOGE PASTUR EXCL 3 JULY    9/75
OCT. 15 TO APR. 15 =  1.60
APR. 15 TO JULY 1  =  2.77
JULY 1 TO SEPT. 1  =   .52
SEPT. 1 TO OCT. 15 =  1.04
SEASON TOTAL       =  5.93
LONG TERM AVERAGE  =  5.38
```

**No utilization

```
14 19   JUN 29  RUNN3AA...
            0913   HORSE  CREEK  EXCL    JULY   22/75  INSIDE AGSM

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.    TOTAL   AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT    WGT.    WGT.    UNIT   PER
               BASAL  CENT   SITION   FREQ.   GMS/20  /PLOT   BASAL  AC.
               AREA   BASAL           BASE    SQ.FT.  OCCUR-  AREA
               PER-   AREA            20              RENCES
               CENT

  6    *ARTR    58.00 2.90E+00             3
  6    *OPPO    32.00 1.60E+00             2
   PER GRASS    49.50  2.47               20      108.93    5.45    2.20 523.05
  3    AGSM     48.40 2.42E+00 8.80E+01  20      108.71    5.44    2.25   5.2199E+02
  3    POSE      1.10 5.50E-02 2.00E+00   4        0.22    0.05    0.20   1.0564E+00
   ANN GRASS     1.30  0.06                4        1.75    0.44    1.35    8.40
  5    BRTE      1.30 6.50E-02 2.36E+00   4
   ANN FORBS     4.20  0.21                9        2.61    0.29    0.62   12.53
  4    CHEN      1.10 5.50E-02 2.00E+00   9
  4    DEPI      2.00 1.00E-01 3.64E+00   7
  4    LARE      1.10 5.50E-02 2.00E+00   5
     TOTAL             7.25     100.00           1.1329E+02              5.4398E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	194.72
CHVI	1.97
OPPO	14.69
PHHO	0.57
Shrub Prod.	211.95
Total	755.93

```
PRECIPITATION DATA
 RAIN GUAGE NO.        HORSE  CREEK  EXCL    JULY   22/75
OCT. 15 TO APR. 15 = 4.40
APR. 15 TO JULY 1  = 3.82
JULY 1 TO SEPT. 1  =  .68
SEPT. 1 TO OCT. 15 = 1.06
SEASON TOTAL       = 9.96
LONG TERM AVERAGE  =11.19
```

**No utilization

```
         0913   HORSE  CREEK  EXCL    JULY   22/75  OUT    AGSM

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.    TOTAL  AVE.   WGT./   LBS
CODE   NAME    TRANS  PER-    COMPO-   PLOT    WGT.   WGT.   UNIT    PER
               BASAL  CENT    SITION   FREQ.   GMS/20 /PLOT  BASAL   AC.
               AREA   BASAL            BASE    SQ.FT. OCCUR- AREA
               PER-   AREA             20             RENCES
               CENT

  6    *ARTR   88.00 4.40E+00             6
  6    *GUSA    4.00 2.00E-01             2
  6    *OPPO    5.00 2.50E-01             1
  PER GRASS    30.00  1.50               20     38.16    1.91   1.27 183.23
  3    AGSM    23.40 1.17E+00 6.19E+01   20     36.43    1.82   1.56  1.7493E+02
  3    POSE     6.60 3.30E-01 1.75E+01   15      1.73    0.12   0.26  8.3069E+00
  ANN GRASS     0.10  0.00                1      1.29    1.29  12.90    6.19
  5    BRTE     0.10 T        2.65E-01    1
  ANN FORBS     7.70  0.38                8     10.23    1.28   1.33   49.12
  4    CHEN     1.10 5.50E-02 2.91E+00    8
  4    DEPI     0.20 1.00E-02 5.29E-01    2
  4    LARE     0.90 4.50E-02 2.38E+00    5
  4    SAKA     4.80 2.40E-01 1.27E+01    5
  4    GIPU     0.30 1.50E-02 7.94E-01    1
  4    UNK      0.40 2.00E-02 1.06E+00    3
     TOTAL            6.74    100.00           4.9680E+01             2.3855E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	190.51
CHVI	11.24
OPPO	14.35
PHHO	2.70
Shrub Prod.	218.85
Total	457.40

```
PRECIPITATION DATA
 RAIN GUAGE NO.       HORSE  CREEK  EXCL    JULY   22/75
OCT. 15 TO APR. 15 = 4.40
APR. 15 TO JULY 1  = 3.82
JULY 1 TO SEPT. 1  =  .68
SEPT. 1 TO OCT. 15 = 1.06
SEASON TOTAL       = 9.96
LONG TERM AVERAGE  =11.19
```

Utilization	253.64
Production Adjusted	711.04

```
           0913   HORSE  CREEK  EXCL   JULY   22/75  INSIDE AGSP

                         NUMBER PLOTS = 20
                           PLOT SIZE 1X1
PLANT  PLANT  TOTAL  AVE.   PERCENT  ABS.     TOTAL  AVE.   WGT./  LBS
CODE   NAME   TRANS  PER-   COMPO-   PLOT     WGT.   WGT.   UNIT   PER
              BASAL  CENT   SITION   FREQ.    GMS/20 /PLOT  BASAL  AC.
              AREA   BASAL           BASE     SQ.FT. OCCUR- AREA
              PER-   AREA            20              RENCES
              CENT

  6   *ARTR     3.50 1.75E-01          2
  6   *GUSA     4.00 2.00E-01          1
  6   *OPPO     7.00 3.50E-01          1
  6   *PHHO     1.00 5.00E-02          1
   PER GRASS   52.20  2.61            18      97.28   5.40   1.86 467.11
  3   AGSP     51.10 2.55E+00 8.45E+01 18     96.90   5.38   1.90  4.6528E+02
  3   POSE      1.10 5.50E-02 1.82E+00  2      0.38   0.19   0.35  1.8246E+00
   PER FORBS    5.00  0.25              2      0.37   0.18   0.07   1.78
  2   SPCC      5.00 2.50E-01 8.26E+00  2
   ANN FORBS    3.30  0.16              9      1.84   0.20   0.56   8.84
  4   CHEN      0.10 T        1.65E-01  1
  4   DEPI      3.20 1.60E-01 5.29E+00  9
     TOTAL           3.80    100.00           9.9490E+01           4.7772E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                          60.23
        OPPO                                                           9.79
        PHHO                                                           1.73
                                                  Shrub Prod.         71.75
                                                        Total        549.47


PRECIPITATION DATA
 RAIN GUAGE NO.      HORSE  CREEK  EXCL   JULY   22/75
OCT. 15 TO APR. 15 = 4.40
APR. 15 TO JULY 1  = 3.82
JULY 1 TO SEPT. 1  =  .68
SEPT. 1 TO OCT. 15 = 1.06
SEASON TOTAL       = 9.96
LONG TERM AVERAGE  =11.19


        **No utilization
        0913   HORSE  CREEK  EXCL    JULY   22/75  OUT    AGSP

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.    TOTAL  AVE.    WGT./   LBS
CCDE   NAME    TRANS  PER-    COMPC-   PLOT    WGT.   WGT.    UNIT    PER
               BASAL  CENT    SITICN   FREQ.   GMS/20 /PLOT   BASAL   AC.
               AREA   BASAL            BASE    SQ.FT. OCCUR-  AREA
               PER-   AREA             20             RENCES
               CENT

  6   *ARTR    48.00 2.40E+00             4
  6   *EULA     8.00 4.00E-01             1
  6   *GUSA    28.00 1.40E+00             6
  6   *OPPO    60.00 3.00E+00             4
  6   *PHHO    31.00 1.55E+00            13
  PER GRASS    20.60  1.03               15     37.06    2.47   1.80 177.95
  3   AGSM      8.10 4.05E-01 2.86E+01 15     22.85    1.52   2.82  1.0972E+02
  3   AGSP      9.80 4.90E-01 3.46E+01  7     13.61    1.94   1.39  6.5351E+01
  3   POSE      2.70 1.35E-01 9.54E+00  6      0.60    0.10   0.22  2.8810E+00
  PER FORBS     6.10  0.30                3      1.18    0.39   0.19   5.67
  2   SPCC      6.10 3.05E-01 2.16E+01  3
  ANN FORBS     1.60  0.08                7      1.01    0.14   0.63   4.85
  4   CHEN      1.10 5.50E-02 3.89E+00  7
  4   DEPI      0.20 T        7.07E-01  1
  4   LEDE      0.30 1.50E-02 1.06E+00  1
    TOTAL           10.16    100.00            3.9250E+01             1.8847E+02

      * NOT COMPUTED IN PERCENT COMPOSITICN
      T - TRACE

PRODUCTION ESTIMATES CF SHRUBS ANC WOODY MAT FORM PLANTS
```

ARTR	196.12
CHVI	44.11
OPPO	15.70
PHHO	7.87
Shrub Prod.	263.80
Total	452.27

```
PRECIPITATION DATA
 RAIN GUAGE NC.        HORSE  CREEK  EXCL    JLLY   22/75
CCT. 15 TC APR. 15 = 4.40
APR. 15 TC JULY 1  = 3.82
JULY 1 TO SEPT. 1  =  .68
SEPT. 1 TC OCT. 15 = 1.06
SEASCN TOTAL       = 9.96
LCNG TERM AVERAGE  =11.19
```

Utilization	244.04
Production Adjusted	696.31

```
14 21    JUN 29  RUNP3AA...
             0914    KANE    DEER    EXCL    AUGUST 6/75    INSIDE NATIVE

                                   NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL    AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-    COMPC-    PLOT     WGT.     WGT.     UNIT     PER
                 BASAL   CENT    SITICN    FREQ.    GMS/20   /PLOT    BASAL    AC.
                 AREA    BASAL             BASE     SQ.FT.   OCCUR-   AREA
                 PER-    AREA              20                RENCES
                 CENT

  6    *ARND      23.00  1.15E+00             1
  6    *GUSA      17.00  8.50E-01             3
  6    *JUCS     284.00  1.42E+01             6
  6    *PHHO       2.00  1.00E-01             1
   PER GRASS       2.40   0.12                3       1.78     0.59     0.74     8.55
  3    AGGR        1.80  9.00E-02 3.10E+01    3       1.70     0.57     0.94    8.1629E+00
  3    POSE        0.60  3.00E-02 1.03E+01    2       0.08     0.04     0.13    3.8414E-01
   PER FORBS       3.30   0.16                3       0.86     0.29     0.26     4.13
  2    ERI         1.00  5.00E-02 1.72E+01    1
  2    ERPU        1.70  8.50E-02 2.93E+01    3
  2    GIAG        0.60  3.00E-02 1.03E+01    2
   ANN GRASS       0.10   0.00                1       0.01     0.01     0.10     0.05
  5    BRTE        0.10  T        1.72E+00    1
     TOTAL              16.59     100.00           2.6500E+00                   1.2724E+01

       * NOT COMPUTED IN PERCENT COMPOSITICN
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS ANC WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NC.         KANE    DEER    EXCL    AUGUST 6/75
OCT. 15 TC APR. 15 =  4.70
APR. 15 TC JULY 1  =  5.44
JULY 1 TO SEPT. 1  =   .76
SEPT. 1 TC OCT. 15 =  1.57
SEASON TOTAL       = 12.47
LCNG TERM AVERAGE  = 12.32
```

**No utilization

```
08 50    JUL 01   RUN348A...
              0914    KANE    DEER    EXCL    AUGUST 6/75    OUT     NATIVE

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT   ABS.      TOTAL   AVE.      WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-    PLOT      WGT.    WGT.      UNIT     PER
                 BASAL   CENT     SITION    FREQ.     GMS/20  /PLOT     BASAL    AC.
                 AREA    BASAL              BASE      SQ.FT.  OCCUR-    AREA
                 PER-    AREA               20                RENCES
                 CENT

  6    *ARHO      2.50 1.25E-01              2
  6    *GUSA      3.00 1.50E-01              1
  6    *JUCS    385.00 1.93E+01              6
  6    *PHHO      7.00 3.50E-01              3
   PER GRASS      2.10  0.10                 4       1.79     0.45     0.85     8.60
  3     ACGR      2.10 1.05E-01 3.96E+01     4       1.79     0.45     0.85   8.5950E+00
   PER FORBS      3.20  0.16                 1       1.23     1.23     0.38     5.91
  2     ASPU      0.50 2.50E-02 9.43E+00     1
  2     ERI       0.70 3.50E-02 1.32E+01     1
  2     ERPU      0.50 2.50E-02 9.43E+00     1
  2     GIAG      1.50 7.50E-02 2.83E+01     1
     TOTAL           20.14     100.00             3.0200E+00                 1.4501E+01

         * NOT COMPUTED IN PERCENT COMPOSITION
         T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.          KANE     DEER    EXCL    AUGUST 6/75
OCT. 15 TO APR. 15  =  4.70
APR. 15 TO JULY 1   =  5.44
JULY 1 TO SEPT. 1   =   .76
SEPT. 1 TO OCT. 15  =  1.57
SEASON TOTAL        = 12.47
LONG TERM AVERAGE   = 12.32
```

**No utilization

```
15 26    JUN 29  RUNJ6AA...
              0914    KANE    DEER    EXCL    AUGUST 6/75    INSIDE SPRAY

                               NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT    TOTAL    AVE.     PERCENT    ABS.       TOTAL    AVE.      WGT./    LBS
CODE    NAME     TRANS    PER-     COMPO-     PLOT       WGT.     WGT.      UNIT     PER
                 BASAL    CENT     SITION     FREQ.      GMS/20   /PLOT     BASAL    AC.
                 AREA     BASAL               BASE       SQ.FT.   OCCUR-    AREA
                 PER-     AREA                20                  RENCES
                 CENT

  6    *GUSA      3.40  1.70E-01               5
   PER GRASS     24.70   1.23                 17        61.25     3.60     2.48  294.10
  3    AGGR      20.20  1.01E+00  3.37E+01    17        59.55     3.50     2.95   2.8594E+02
  3    ARLC       0.50  2.50E-02  8.33E-01     1         0.34     0.34     0.68   1.6326E+00
  3    KOCR       1.00  5.00E-02  1.67E+00     1         0.71     0.71     0.71   3.4092E+00
  3    POSE       3.00  1.50E-01  5.00E+00     7         0.65     0.09     0.22   3.1211E+00
   PER FORBS     27.20   1.36                  5        13.20     2.64     0.49   63.38
  2    ERI       12.00  6.00E-01  2.00E+01     3
  2    ERPU       9.70  4.85E-01  1.62E+01     5
  2    GIAG       5.50  2.75E-01  9.17E+00     5
   ANN GRASS      0.50   0.02                  3         0.27     0.09     0.54    1.30
  5    BRTE       0.50  2.50E-02  8.33E-01     3
   ANN FORBS      7.60   0.38                  7         9.63     1.38     1.27   46.24
  4    COM        4.30  2.15E-01  7.17E+00     6
  4    DEPI       0.20  T         3.33E-01     1
  4    LAC        1.10  5.50E-02  1.83E+00     5
  4    LARE       1.80  9.00E-02  3.00E+00     7
  4    SAKA       0.20  T         3.33E-01     1
     TOTAL              3.17     100.00                 8.4350E+01                  4.0502E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.         KANE    DEER    EXCL    AUGUST 6/75
OCT. 15 TO APR. 15 = 4.70
APR. 15 TO JULY 1  = 5.44
JULY 1 TO SEPT. 1  =  .76
SEPT. 1 TO OCT. 15 = 1.57
SEASON TOTAL       =12.47
LONG TERM AVERAGE  =12.32
```

**No utilization

```
OP 50    JUL 01  RUN248A...
            0914    KANE    DEER    EXCL   AUGUST 6/75   OUT     SPRAY

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL    AVE.     PERCENT   ABS.     TOTAL    AVE.     WGT./    LBS
CODE    NAME     TRANS    PER-     COMPO-    PLOT     WGT.     WGT.     UNIT     PER
                 BASAL    CENT     SITION    FREQ.    GMS/20   /PLOT    BASAL    AC.
                 AREA     BASAL              BASE     SQ.FT.   OCCUR-   AREA
                 PER-     AREA               20                RENCES
                 CENT

  6     *GUSA    181.00  9.05E+00              10
  6     *ARFR      6.00  3.00E-01               1
   PER GRASS      10.50   0.52                  8        7.74     0.97     0.74    37.17
  3      AGGR      5.80  2.90E-01  1.70E+01     7        6.06     0.87     1.04    2.9098E+01
  3      POSE      4.70  2.35E-01  1.37E+01     8        1.68     0.21     0.36    8.0668E+00
   PER FORBS      17.30   0.86                  5       14.58     2.92     0.84    70.01
  2      ERI       9.00  4.50E-01  2.63E+01     4
  2      ERPU      3.90  1.95E-01  1.14E+01     5
  2      GIAC      1.00  5.00E-02  2.92E+00     1
  2      MINT      3.40  1.70E-01  9.94E+00     4
   ANN FORBS       6.40   0.32                 10        5.21     0.52     0.81    25.02
  4      CICA      0.60  3.00E-02  1.75E+00     2
  4      COM       5.00  2.50E-01  1.46E+01    10
  4      LARE      0.80  4.00E-02  2.34E+00     5
     TOTAL              11.06     100.00               2.7530E+01                  1.3219E+02

         * NOT COMPUTED IN PERCENT COMPOSITION
         T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.         KANE    DEER    EXCL    AUGUST 6/75
OCT. 15 TO APR. 15 = 4.70
APR. 15 TO JULY 1  = 5.44
JULY 1 TO SEPT. 1  =  .76
SEPT. 1 TO OCT. 15 = 1.57
SEASON TOTAL       = 12.47
LONG TERM AVERAGE  = 12.32
```

**No utilization

```
09 28    JUL 01  RUNB6BA...
           0921    KANE    G.R.I. EXCL    AUGUST 6/75    INSIDE SPRAY

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT   PLANT    TOTAL    AVE.     PERCENT    ABS.      TOTAL    AVE.      WGT./    LBS
CODE    NAME     TRANS    PER-     COMPO-     PLOT      WGT.     WGT.      UNIT     PER
                 BASAL    CENT     SITION     FREQ.     GMS/20   /PLOT     BASAL    AC.
                 AREA     BASAL               BASE      SQ.FT.   OCCUR-    AREA
                 PER-     AREA                20                 RENCES
                 CENT

  6    *GUSA     65.20  3.26E+00                 7
   PER GRASS     15.20   0.76                    5      47.81      9.56    3.15  229.57
  3     AGGR      5.80  2.90E-01  9.72E+00       5       8.31      1.66    1.43   3.9902E+01
  3     AGSP      7.30  3.65E-01  1.22E+01       3      38.63     12.88    5.29   1.8549E+02
  3     POSE      2.10  1.05E-01  3.52E+00       2       0.87      0.43    0.41   4.1775E+00
   PER FORBS     22.10   1.10                    6      15.05      2.51    0.68   72.27
  2     EROV     15.00  7.50E-01  2.51E+01       1
  2     CIAG      7.10  3.55E-01  1.19E+01       6
   ANN FORBS     17.40   0.87                   15      40.54      2.70    2.33  194.66
  4     CCM       1.70  8.50E-02  2.85E+00       3
  4     DEPI      0.20  T         3.35E-01       1
  4     LAC      10.90  5.45E-01  1.83E+01      15
  4     SILI      4.10  2.05E-01  6.87E+00       7
  4     UNK       0.50  2.50E-02  8.38E-01       1
   ANN GRASS      5.00   0.25                    1       4.72      4.72    0.94   22.66
  5     BRTE      5.00  2.50E-01  8.38E+00       1
     TOTAL               6.24    100.00                1.0812E+02                  5.1916E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

         No shrub data collected

PRECIPITATION DATA
 RAIN GUAGE NO.         KANE    G.R.I. EXCL    AUGUST 6/75
OCT. 15 TO APR. 15 = 5.59
APR. 15 TO JULY 1  = 5.96
JULY 1 TO SEPT. 1  =  .67
SEPT. 1 TO OCT. 15 = 1.61
SEASON TOTAL       =13.83
LONG TERM AVERAGE  =13.15

         **No utilization
```

```
          9021   KANE   G.R.I. EXCL   AUGUST 6/75   OUT    NATIVE

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.   TOTAL  AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT   WGT.   WGT.    UNIT   PER
               BASAL  CENT   SITION   FREQ.  GMS/20 /PLOT   BASAL  AC.
               AREA   BASAL           BASE   SQ.FT. OCCUR-  AREA
               PER-   AREA            20            RENCES
               CENT

  6   *ARNO    48.00 2.40E+00          6
  6   *GASA     2.00 1.00E-01          2
  6   *JUCS   140.00 7.00E+00          2
  6   *PHHO     4.00 2.00E-01          3
  PER GRASS     3.30  0.16             7      2.27    0.32    0.69   10.90
  3   AGGR      3.30 1.65E-01 4.02E+01 7      2.27    0.32    0.69   1.0900E+01
  PER FORBS     4.90  0.24             3      0.96    0.32    0.20    4.61
  2   ERICG     2.00 1.00E-01 2.44E+01 2
  2   GIAG      2.90 1.45E-01 3.54E+01 3
    TOTAL           10.11    100.00          3.2300E+00              1.5509E+01

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.        KANE   G.R.I. EXCL   AUGUST 6/75
OCT. 15 TO APR. 15 = 5.59
APR. 15 TO JULY 1  = 5.96
JULY 1 TO SEPT. 1  =  .67
SEPT. 1 TO OCT. 15 = 1.61
SEASON TOTAL       = 13.83
LONG TERM AVERAGE  = 13.15
```

**No utilization

```
1502   KIRBY   CREEK   EXCL    JULY    24/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

 6   *SAVE     130.00 6.50E+00             4
  PER GRASS     20.40  1.02               12     132.97   11.08   6.52 638.48
 3   AGSM       17.20 8.60E-01 2.62E+01 12     121.18   10.10   7.05   5.8187E+02
 3   POSE        3.20 1.60E-01 4.88E+00  3      11.79    3.93   3.68   5.6612E+01
  ANN GRASS      2.40  0.12                4       8.69    2.17   3.62   41.73
 5   BRTE        2.40 1.20E-01 3.66E+00  4
  ANN FORBS     42.80  2.14               20     251.86   12.59   5.88   1,208.92
 4   CHAL        4.40 2.20E-01 6.71E+00 10
 4   LARE        2.10 1.05E-01 3.20E+00  7
 4   LEPE       35.60 1.78E+00 5.43E+01 20
 4   MAGL        0.50 2.50E-02 7.62E-01  1
 4   UNK1        0.20 T        3.05E-01  1
    TOTAL               9.78    100.00           3.9352E+02                1.8896E+03

       * NOT COMPUTED IN PERCENT COMPOSITION
       T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


       SAVE                                                              185.52
                                                      Shrub Prod.        185.52
                                                            Total      2,075.12

PRECIPITATION DATA
 RAIN GUAGE NO.          KIRBY  CREEK  EXCL    JULY    24/75
OCT. 15 TO APR. 15  = 2.63
APR. 15 TO JULY 1   = 7.55
JULY 1 TO SEPT. 1   =  NR
SEPT. 1 TO OCT. 15  = 2.26
SEASON TOTAL        =12.44
LONG TERM AVERAGE   = 9.20
```

**No utilization

```
21 51    JUN 29  RUNYFBA...
            1502    KIRBY  CREEK  EXCL     JULY    24/75  OUT     NATIVE

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.    TOTAL   AVE.     WGT./   LBS
CODE   NAME    TRANS  PER-    COMPO-   PLOT    WGT.    WGT.     UNIT    PER
               BASAL  CENT    SITION   FREQ.   GMS/20  /PLOT    BASAL   AC.
               AREA   BASAL            BASE    SQ.FT.  OCCUR-   AREA
               PER-   AREA             20              RENCES
               CENT

  6   *OPPO    25.00 1.25E+00             2
  6   *SAVE    54.00 2.70E+00             4
   PER GRASS   18.10  0.90               12    147.92  12.33   8.17  710.27
  3    AGSM    13.40 6.70E-01 1.72E+01  12    142.07  11.84  10.60   6.8218E+02
  3    POSE     4.70 2.35E-01 6.05E+00   3      5.85   1.95   1.24   2.8090E+01
   ANN GRASS    0.40  0.02                2      1.10   0.55   2.75     5.28
  5    BRTE     0.40 2.00E-02 5.15E-01   2
   ANN FORBS   59.20  2.96               18    251.99  14.00   4.26   1,209.55
  4    BRA      3.00 1.50E-01 3.86E+00   2
  4    CHAL    16.30 8.15E-01 2.10E+01   7
  4    DEPI     1.20 6.00E-02 1.54E+00   2
  4    LARI     2.20 1.10E-01 2.83E+00   5
  4    LEPE    36.00 1.80E+00 4.63E+01  18
  4    UNK      0.50 2.50E-02 6.44E-01   2
     TOTAL           7.83     100.00           4.0101E+02              1.9255E+03

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        SAVE                                                           129.57
        OPPO                                                             2.39
                                                          Shrub Prod.  131.96
                                                               Total 2,057.46


PRECIPITATION DATA
 RAIN GUAGE NO.           KIRBY  CREEK  EXCL     JULY    24/75
OCT. 15 TO APR. 15 = 2.63
APR. 15 TO JULY 1  = 7.55
JULY 1 TO SEPT. 1  =  NR
SEPT. 1 TO OCT. 15 = 2.26
SEASON TOTAL       =12.44
LONG TERM AVERAGE  = 9.20
```

```
20 08    JUN 29  RUNRDBA...
             1001   LANDER ANT     EXCL   AUG    20/75  INSIDE NATIVE

                                   NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT

  6    *ARTR    278.00 1.39E+01            15
  6    *OPPO     15.00 7.50E-01             1
  6    *PHHO     10.00 5.00E-01             1
   PER GRASS    19.50  0.97                18      21.00    1.17    1.08 100.84
  3     AGSM     6.80 3.40E-01 3.15E+01 18       9.79    0.54    1.44  4.7009E+01
  3     BOGR     0.80 4.00E-02 3.70E+00  1       0.33    0.33    0.41  1.5846E+00
  3     CAEL     0.80 4.00E-02 3.70E+00  3       0.31    0.10    0.39  1.4885E+00
  3     ORHY     0.40 2.00E-02 1.85E+00  1       1.13    1.13    2.82  5.4259E+00
  3     POSE     2.30 1.15E-01 1.06E+01  8       1.26    0.16    0.55  6.0501E+00
  3     STCC     8.40 4.20E-01 3.89E+01  8       8.18    1.02    0.97  3.9278E+01
   PER FORBS     2.00  0.10                 2       0.40    0.20    0.20   1.92
  2     ALTE     1.00 5.00E-02 4.63E+00  1
  2     SPCC     1.00 5.00E-02 4.63E+00  2
   ANN FORBS     0.10  0.00                 1       0.01    0.01    0.10   0.05
  4     PLPA     0.10 T          4.63E-01  1
     TOTAL             16.23     100.00          2.1410E+01                1.0280E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        ARTR                                                              191.35
        OPPO                                                               21.27
        PHHO                                                                8.29
                                                          Shrub Prod.     220.91
                                                               Total      323.71

PRECIPITATION DATA
 RAIN GUAGE NO.         LANDER ANT     EXCL    AUG     20/75
OCT. 15 TO APR. 15 =  RI
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =   .41
SEPT. 1 TC OCT. 15 =   .65
SEASON TOTAL       =
LONG TERM AVERAGE  =  8.76
```

**No utilization

```
20 08    JUN 29  RUNSDBA...
            1001   LANDER ANT     EXCL    AUG     20/75  OUT     NATIVE

                                 NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT  PLANT    TOTAL  AVE.     PERCENT  ABS.    TOTAL   AVE.     WGT./   LBS
CODE   NAME     TRANS  PER-     COMPO-   PLOT    WGT.    WGT.     UNIT    PER
                BASAL  CENT     SITION   FREQ.   GMS/20  /PLOT    BASAL   AC.
                AREA   BASAL             BASE    SQ.FT.  OCCUR-   AREA
                PER-   AREA              20              RENCES
                CENT

  6    *ARTR    269.00 1.34E+01             15
  6    *OPPO     42.00 2.10E+00              3
  6    *PHHO     13.00 6.50E-01              2
   PER GRASS     25.00  1.25                20     37.31     1.87    1.49  179.15
  3    AGSM      9.20 4.60E-01 3.22E+01  20     16.55     0.83    1.80   7.9468E+01
  3    CAEL      0.40 2.00E-02 1.40E+00   1      0.25     0.25    0.62   1.2004E+00
  3    ORHY      1.80 9.00E-02 6.29E+00   2      2.95     1.47    1.64   1.4165E+01
  3    POSE      5.80 2.90E-01 2.03E+01  12      1.98     0.16    0.34   9.5074E+00
  3    STCC      7.80 3.90E-01 2.73E+01   9     15.58     1.73    2.00   7.4810E+01
   PER FORBS     3.20  0.16                  3      1.05     0.35    0.33     5.04
  2    ALTE      1.00 5.00E-02 3.50E+00   1
  2    ERPU      0.60 3.00E-02 2.10E+00   2
  2    MACA      0.30 1.50E-02 1.05E+00   1
  2    SPCC      1.30 6.50E-02 4.55E+00   3
   ANN FORBS     0.40  0.02                  2      0.14     0.07    0.35     0.67
  4    LATE      0.20 T        6.99E-01   1
  4    PLPA      0.20 1.00E-02 6.99E-01   2
    TOTAL              17.63    100.00          3.8500E+01                1.8487E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		182.83
OPPO		35.34
PHHO		5.45
	Shrub Prod.	223.65
	Total	408.52

```
PRECIPITATION DATA
 RAIN GUAGE NO.          LANDER ANT     EXCL    AUG     20/75
OCT. 15 TO APR. 15 =  RI
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =  .41
SEPT. 1 TO OCT. 15 =  .65
SEASON TOTAL       =
LONG TERM AVERAGE  =  8.76
```

**No utilization

```
20 08    JUN 29  RUNTDBA...
             1003    LOWER   GOVT    DRAW    AUG     18/75  INSIDE NATIVE

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CCDE    NAME    TRANS   PER-    COMPC-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARTR   402.00 2.01E+01             9
   PER GRASS   34.80   1.74               19    104.69    5.51   3.01 502.69
  3    AGSM    21.50 1.07E+00 2.95E+01 19     81.80    4.31   3.80  3.9278E+02
  3    KOCR     2.00 1.00E-01 2.74E+00  1      8.62    8.62   4.31  4.1391E+01
  3    POFE     1.00 5.00E-02 1.37E+00  1      2.31    2.31   2.31  1.1092E+01
  3    POSE     3.20 1.60E-01 4.38E+00  6      0.85    0.14   0.27  4.0814E+00
  3    STCC     7.10 3.55E-01 9.73E+00  5     11.11    2.22   1.56  5.3347E+01
   PER FORBS   30.60   1.53                5     34.54    6.91   1.13 165.85
  2    AST     28.00 1.40E+00 3.84E+01  5
  2    CAS      0.80 4.00E-02 1.10E+00  4
  2    PHMU     0.30 1.50E-02 4.11E-01  1
  2    SPCC     1.50 7.50E-02 2.05E+00  3
   ANN GRASS    6.80   0.34               15     11.42    0.76   1.68  54.84
  5    BRTE     6.80 3.40E-01 9.32E+00 15
   ANN FORBS    0.80   0.04                2      0.23    0.11   0.29   1.10
  4    LEDE     0.30 1.50E-02 4.11E-01  1
  4    PLSP     0.50 2.50E-02 6.85E-01  2
     TCTAL            23.75    100.00          1.5088E+02              7.2448E+02

       * NOT COMPUTED IN PERCENT COMPOSITICN
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        ARTR                                                          535.71
        PHHO                                                            1.37
                                                         Shrub Prod.  537.08
                                                              Total 1,261.56

PRECIPITATION DATA
 RAIN GUAGE NC.          LOWER   GOVT    DRAW    AUG     18/75
OCT. 15 TC APR. 15 =  RI 4.90
APR. 15 TC JULY 1  =  4.90
JULY 1 TO SEPT. 1  =   .53
SEPT. 1 TC OCT. 15 =   .85
SEASCN TOTAL       = 11.18
LCNG TERM AVERAGE  = 10.93

        **No utilization
```

```
20 08    JUN 29  RUNWDBA...
            1003    LOWER   GOVT    DRAW    AUG     18/75  OUT     NATIVE

                                        NUMBER PLOTS = 20
                                           PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT    ABS.     TOTAL   AVE.    WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-     PLOT     WGT.    WGT.    UNIT     PER
                 BASAL   CENT     SITION     FREQ.    GMS/20  /PLOT   BASAL    AC.
                 AREA    BASAL               BASE     SQ.FT.  OCCUR-  AREA
                 PER-    AREA                20               RENCES
                 CENT

  6    *ARTR    267.00  1.33E+01                10
  6    *CHVI     37.00  1.85E+00                 2
   PER GRASS     18.40   0.92                   13     25.37    1.95    1.38  121.82
  3    AGSM       6.80  3.40E-01  1.64E+01      13     19.76    1.52    2.91   9.4881E+01
  3    KOCR       0.50  2.50E-02  1.21E+00       1      0.30    0.30    0.60   1.4405E+00
  3    POFE       6.80  3.40E-01  1.64E+01       8      3.51    0.44    0.52   1.6854E+01
  3    POSE       4.30  2.15E-01  1.04E+01       6      1.80    0.30    0.42   8.6430E+00
   PER FORBS     11.40   0.57                   11      3.58    0.33    0.31   17.19
  2    ASPU       0.20  T         4.83E-01       1
  2    CANU       0.30  1.50E-02  7.25E-01       1
  2    PHMU       6.90  3.45E-01  1.67E+01      11
  2    SPCC       3.70  1.85E-01  8.94E+00       5
  2    VIO        0.30  1.50E-02  7.25E-01       1
   ANN GRASS     11.10   0.55                   14     17.18    1.23    1.55   82.49
  5    BRTE      10.60  5.30E-01  2.56E+01      14
  5    VUOC       0.50  2.50E-02  1.21E+00       1
   ANN FORBS      0.50   0.02                    2      0.20    0.10    0.40    0.96
  4    DEPI       0.30  1.50E-02  7.25E-01       2
  4    PLSP       0.20  1.00E-02  4.83E-01       2
     TOTAL             17.27     100.00               4.6330E+01               2.2246E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

                                                                          475.53
        ARTR                                                                2.78
        CHVI                                                                2.42
        OPPO                                                 Shrub Prod.  478.53
                                                                   Total  700.99

PRECIPITATION DATA
 RAIN GUAGE NO.         LOWER   GOVT    DRAW    AUG     18/75
OCT. 15 TO APR. 15 = RI 4.90
APR. 15 TO JULY 1  = 4.90
JULY 1 TO SEPT. 1  =  .53
SEPT. 1 TO OCT. 15 =  .85
SEASON TOTAL       =11.18
LONG TERM AVERAGE  =10.93

                                                           Utilization  136.59
                                                   Production Adjusted  837.58
```

```
20 08    JUN 29  RUNVDBA...
             1003    LOWER  GOVT    DRAW    AUG     18/75  INSIDE SPRAY

                                  NUMBER PLOTS = 20
                                    PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                 BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                 AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                 PER-    AREA              20              RENCES
                 CENT

   PER GRASS     36.70  1.83                20     133.84    6.69   3.65 642.66
  3    AGSM      29.00  1.45E+00  4.76E+01  20      95.22    4.76   3.28  4.5722E+02
  3    POFE       1.00  5.00E-02  1.64E+00   1       2.50    2.50   2.50  1.2004E+01
  3    POSE       1.30  6.50E-02  2.13E+00   2       0.31    0.15   0.24  1.4885E+00
  3    STCO       5.40  2.70E-01  8.87E+00   5      35.81    7.16   6.63  1.7195E+02
   PER FORBS      6.20   0.31               12       3.41    0.28   0.55  16.37
  2    CAS        3.60  1.80E-01  5.91E+00  12
  2    SPCO       2.60  1.30E-01  4.27E+00   2
   ANN GRASS     17.00   0.85               20      33.02    1.65   1.94 158.55
  5    BRTE      17.00  8.50E-01  2.79E+01  20
   ANN FORBS      1.00   0.05                2       0.90    0.45   0.90    4.32
  4    CAMI       0.50  2.50E-02  8.21E-01   2
  4    CHEN       0.20  T         3.28E-01   1
  4    LEPE       0.30  1.50E-02  4.93E-01   2
     TOTAL              3.04     100.00           1.7117E+02             8.2191E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                           10.52
        OPPO                                                            1.91
                                                         Shrub Prod.   12.43
PRECIPITATION DATA                                             Total  834.34
 RAIN GUAGE NO.       LOWER   GOVT    DRAW    AUG     18/75
OCT. 15 TO APR. 15 =  RI 4.90
APR. 15 TO JULY 1  =  4.90
JULY 1 TO SEPT. 1  =   .53
SEPT. 1 TO OCT. 15 =   .85
SEASON TOTAL       = 11.18
LONG TERM AVERAGE  = 10.93

        **No utilization
```

```
21 03    JUN 29   RUNAFBA...
           1003    LOWER   GOVT    DRAW    AUG      16/75   OUT      SPRAY

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT     WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.    GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE     SQ.FT.  OCCUR-  AREA
                PER-    AREA             20               RENCES
                CENT

  6    *ARTR    21.00 1.05E+00             2
  6    *OPPO    45.00 2.25E+00             1
  PER GRASS     33.50  1.67               20      55.98    2.80   1.67 268.80
  3    AGSM     14.80 7.40E-01 2.24E+01   20      49.74    2.49   3.36   2.3884E+02
  3    POFE      8.10 4.05E-01 1.23E+01    7       3.20    0.46   0.40   1.5365E+01
  3    POSE     10.60 5.30E-01 1.61E+01   14       3.04    0.22   0.29   1.4597E+01
  PER FORBS      8.50  0.42               11       2.14    0.19   0.25   10.28
  2    ASPU      0.20 T        3.03E-01    1
  2    PHMU      6.50 3.25E-01 9.85E+00   11
  2    SPCO      1.80 9.00E-02 2.73E+00    2
  ANN GRASS     22.70  1.13               19      30.40    1.60   1.34 145.97
  5    BRTE     19.00 9.50E-01 2.88E+01   19
  5    VUOC      3.70 1.85E-01 5.61E+00    5
  ANN FORBS      1.30  0.06                5       0.19    0.04   0.15    0.91
  4    CHEN      0.10 T        1.52E-01    1
  4    DEPI      0.30 1.50E-02 4.55E-01    1
  4    PLSP      0.90 4.50E-02 1.36E+00    5
    TOTAL              6.60    100.00         8.8710E+01              4.2596E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


       ARTR                                                                 35.39
       CHVI                                                                  4.13
                                                        Shrub Prod.         39.52
                                                              Total        465.48

PRECIPITATION DATA
 RAIN GUAGE NO.         LOWER   GOVT    DRAW    AUG     16/75
OCT. 15 TO APR. 15 =  RI 4.90
APR. 15 TO JULY 1  =  4.90
JULY 1 TO SEPT. 1  =   .53
SEPT. 1 TO OCT. 15 =   .85
SEASON TOTAL       = 11.18
LONG TERM AVERAGE  = 10.93


                                                   Utilization  308.11
                                          Production Adjusted  773.59
```

```
20 10    JUN 29  RUNZDBA...
             1004    MCGRAW FLATS   EXCL    AUGUST 15/75   INSIDE NATIVE

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR    193.00 9.65E+00             12
  6    *CHVI     23.00 1.15E+00              3
  6    *PHHO     14.00 7.00E-01              5
   PER GRASS     36.20  1.81                20       75.60    3.78    2.09 363.01
  3     AGSM     14.60 7.30E-01 2.90E+01 20       52.84    2.64    3.62   2.5372E+02
  3     POFE     21.00 1.05E+00 4.17E+01 12       22.63    1.89    1.08   1.0866E+02
  3     POSE      0.60 3.00E-02 1.19E+00  2        0.13    0.06    0.22   6.2422E-01
   PER FORBS      7.00  0.35                 9       10.76    1.20    1.54   51.67
  2     ERPU      0.70 3.50E-02 1.39E+00  2
  2     SPCC      1.00 5.00E-02 1.99E+00  3
  2     TRI       0.30 1.50E-02 5.96E-01  1
  2     VIAM      5.00 2.50E-01 9.94E+00  9
   ANN FORBS      7.10  0.35                11       11.09    1.01    1.56   53.25
  4     CAMI      0.20 T        3.98E-01  1
  4     CORA      6.90 3.45E-01 1.37E+01 11
     TOTAL             14.01    100.00          9.7450E+01                4.6792E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		294.90
CHVI		13.80
PHHO		61.90
	Shrub Prod.	370.60
	Total	838.52

```
PRECIPITATION DATA
 RAIN GUAGE NO.        MCGRAW FLATS   EXCL    AUGUST 15/75
OCT. 15 TO APR. 15 =  RI
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  = 10.04
```

**No utilization

```
20 12    JUN 29  RUN2DBA...
             1004   MCGRAW FLATS   EXCL    AUGUST 15/75  OUT     NATIVE

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.     TOTAL   AVE.    WGT./    LBS
CODE    NAME    TRANS   PER-    COMPO-   PLOT     WGT.    WGT.    UNIT     PER
                BASAL   CENT    SITION   FREQ.    GMS/20  /PLOT   BASAL    AC.
                AREA    BASAL            BASE     SQ.FT.  OCCUR-  AREA
                PER-    AREA             20               RENCES
                CENT

  6    *ARTR   280.00 1.40E+01             16
  6    *CHVI    18.00 9.00E-01              5
  6    *PHHO    37.00 1.85E+00              3
   PER GRASS    44.60  2.23                19      62.98   3.31   1.41  302.41
  3    AGSM     13.40 6.70E-01 2.22E+01 19      38.08   2.00   2.84   1.8285E+02
  3    POFE     27.60 1.38E+00 4.57E+01 18      22.62   1.26   0.82   1.0861E+02
  3    POSE      3.60 1.80E-01 5.96E+00  7       2.28   0.33   0.63   1.0948E+01
   PER FORBS     9.00  0.45               10      11.05   1.10   1.23   53.06
  2    ERPU      4.40 2.20E-01 7.28E+00  7
  2    VIAM      4.60 2.30E-01 7.62E+00 10
   ANN FORBS     6.80  0.34                7       7.92   1.13   1.16   38.03
  4    CORA      6.80 3.40E-01 1.13E+01  7
      TOTAL             19.77    100.00          8.1950E+01              3.9350E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		221.18
CHVI		30.06
PHHO		47.16
	Shrub Prod.	298.40
	Total	691.90

```
PRECIPITATION DATA
 RAIN GUAGE NO.          MCGRAW FLATS   EXCL    AUGUST 15/75
OCT. 15 TO APR. 15 =  RI
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  = 10.04
```

Utilization	141.19
Production Adjusted	833.09

```
20 13    JUN 29  RUN3DBA...
           0920   MEDICI LODGE  EXCL    AUGUST 7/75   INSIDE SPRAY

                               NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL  AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPC-   PLCT    WGT.   WGT.    UNIT    PER
                BASAL   CENT    SITICN   FREQ.   GMS/20 /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT. OCCUR-  AREA
                PER-    AREA             20             RENCES
                CENT

  6   *ARTR     20.00 1.00E+00            2
   PER GRASS    13.80  0.69               7     23.72    3.39   1.72 113.90
  3    AGSP      1.20 6.00E-02 3.06E+00   2      1.83    0.91   1.52  8.7871E+00
  3    FEIC     10.20 5.10E-01 2.60E+01   7     20.09    2.87   1.97  9.6466E+01
  3    KOCR      0.30 1.50E-02 7.65E-01   1      0.14    0.14   0.47  6.7224E-01
  3    POSE      0.90 4.50E-02 2.30E+00   3      0.33    0.11   0.37  1.5846E+00
  3    STCC      1.20 6.00E-02 3.06E+00   3      1.33    0.44   1.11  6.3863E+00
   PER FORBS     0.50  0.02               1      0.02    0.02   0.04   0.10
  2    OECA      0.50 2.50E-02 1.28E+00   1
   ANN GRASS    10.80  0.54              13     24.70    1.90   2.29 118.60
  5    BRTE     10.80 5.40E-01 2.76E+01  13
   ANN FORBS    14.10  0.70              18      9.49    0.53   0.67  45.57
  4    CHEN      0.50 2.50E-02 1.28E+00   4
  4    DEPI      0.10 T        2.55E-01   1
  4    GISP      0.20 T        5.10E-01   1
  4    LARE      0.10 T        2.55E-01   1
  4    LEDE     11.60 5.80E-01 2.96E+01  18
  4    MIGR      1.10 5.50E-02 2.81E+00   6
  4    UNK       0.50 2.50E-02 1.28E+00   3
     TOTAL            2.96     100.00           5.7930E+01              2.7816E+02

        * NOT COMPUTED IN PERCENT COMPOSITICN
        T - TRACE

PRODUCTICN ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NC.        MEDICI LODGE  EXCL    AUGUST 7/75
OCT. 15 TC APR. 15 =   6.02
APR. 15 TC JULY 1  =   5.40
JULY 1 TO SEPT. 1  =    .70
SEPT. 1 TC OCT. 15 =   1.10
SEASCN TOTAL       =  13.22
LCNG TERM AVERAGE  =  13.74
```

**No utilization

```
20 18    JUN 29  RUN5DBA...
            0920   MEDICI LODGE  EXCL   AUGUST 7/75   OUT     NATIVE

                            NUMBER PLOTS = 20
                              PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARTR    78.00 3.90E+00              6
  6    *GUSA     6.00 3.00E-01              1
  6    *JUCS    60.00 3.00E+00              2
  6    *PHHO     2.00 1.00E-01              1
   PER GRASS    13.80  0.69                 9     13.47    1.50   0.98   64.68
  3     AGSP     1.00 5.00E-02 4.10E+00     3      1.30    0.43   1.30   6.2422E+00
  3     FEIC     1.70 8.50E-02 6.97E+00     2      2.52    1.26   1.48   1.2100E+01
  3     KOCR     1.90 9.50E-02 7.79E+00     6      0.95    0.16   0.50   4.5616E+00
  3     POSE     3.70 1.85E-01 1.52E+01     9      1.05    0.12   0.28   5.0418E+00
  3     STCC     5.50 2.75E-01 2.25E+01     9      7.65    0.85   1.39   3.6733E+01
   PER FORBS     2.30  0.11                 2      0.10    0.05   0.04    0.48
  2     ALTE     1.00 5.00E-02 4.10E+00     1
  2     LERE     1.30 6.50E-02 5.33E+00     2
   ANN FORBS     8.30  0.41                14      6.00    0.43   0.72   28.81
  4     LEDE     4.70 2.35E-01 1.93E+01    14
  4     MIGR     1.00 5.00E-02 4.10E+00     7
  4     UNK      2.60 1.30E-01 1.07E+01     4
     TOTAL              8.52    100.00           1.9570E+01             9.3969E+01

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.        MEDICI LODGE  EXCL   AUGUST 7/75
OCT. 15 TO APR. 15 =  6.02
APR. 15 TO JULY 1  =  5.40
JULY 1 TO SEPT. 1  =   ,70
SEPT. 1 TO OCT. 15 =  1.10
SEASON TOTAL        = 13.22
LONG TERM AVERAGE   = 13.74
```

**No utilization

```
20 19    JUN 29  RUN6DBA...
            2301    MESA    ANTELO EXCL    AUG      13/75  INSIDE NATIVE

                                    NUMBER PLOTS = 20
                                       PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT   ABS.      TOTAL   AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-    PLOT      WGT.    WGT.     UNIT     PER
                 BASAL   CENT     SITION    FREQ.     GMS/20  /PLOT    BASAL    AC.
                 AREA    BASAL              BASE      SQ.FT.  OCCUR-   AREA
                 PER-    AREA               20                RENCES
                 CENT

  6    *ARTR    359.00 1.79E+01               17
  6    *CHVI     18.00 9.00E-01                4
  6    *PHHO     10.00 5.00E-01                2
   PER GRASS     19.00  0.95                  14       14.15     1.01    0.74   67.94
  3    AGSM       9.00 4.50E-01 4.23E+01  14        8.90     0.64    0.99   4.2735E+01
  3    CAEL       1.10 5.50E-02 5.16E+00   4        0.53     0.13    0.48   2.5449E+00
  3    ORHY       0.60 3.00E-02 2.82E+00   1        0.37     0.37    0.62   1.7766E+00
  3    POSE       7.10 3.55E-01 3.33E+01  10        3.11     0.31    0.44   1.4933E+01
  3    SIHY       1.20 6.00E-02 5.63E+00   3        1.24     0.41    1.03   5.9541E+00
   ANN FORBS      2.30  0.11                 8        0.46     0.06    0.20    2.21
  4    CHEN       0.60 3.00E-02 2.82E+00   3
  4    DEPI       0.10 T          4.69E-01   1
  4    UNK        1.60 8.00E-02 7.51E+00   8
      TOTAL             20.41    100.00           1.4610E+01                 7.0153E+01

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.         MESA    ANTELO EXCL    AUG      13/75
OCT. 15 TO APR. 15 =
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  =
```

**No utilization

```
20 20    JUN 29  RUNAEBA...
             2301    MESA    ANTELO EXCL    AUG      13/75   OUT      NATIVE

                                   NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT  ABS.     TOTAL   AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-   PLOT     WGT.    WGT.     UNIT     PER
                 BASAL   CENT     SITION   FREQ.    GMS/20  /PLOT    BASAL    AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6     *ARTR    328.00 1.64E+01           17
  6     *CHVI     35.00 1.75E+00            7
  6     *EULA      4.00 2.00E-01            1
  6     *PHHO     47.00 2.35E+00            9
   PER GRASS      20.10  1.00              20     20.66     1.03     1.03    99.20
  3     AGSM      10.10 5.05E-01 4.93E+01 20     15.09     0.75     1.49    7.2458E+01
  3     CAEL       1.00 5.00E-02 4.88E+00  3      0.47     0.16     0.47    2.2568E+00
  3     ORHY       2.10 1.05E-01 1.02E+01  3      1.45     0.48     0.69    6.9625E+00
  3     POSE       6.20 3.10E-01 3.02E+01 11      2.45     0.22     0.40    1.1764E+01
  3     SIHY       0.40 2.00E-02 1.95E+00  1      0.31     0.31     0.77    1.4885E+00
  3     STCC       0.30 1.50E-02 1.46E+00  1      0.89     0.89     2.97    4.2735E+00
   ANN FORBS       0.40  0.02               2      0.04     0.02     0.10     0.19
  4     CHEN       0.20 1.00E-02 9.76E-01  2
  4     DEPI       0.10 T        4.88E-01  1
  4     LARE       0.10 T        4.88E-01  1
     TOTAL              21.72    100.00           2.0700E+01                   9.9395E+01

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

No shrub data collected

```
PRECIPITATION DATA
 RAIN GUAGE NO.        MESA    ANTELO EXCL    AUG      13/75
OCT. 15 TO APR. 15 =
APR. 15 TO JULY 1  =
JULY 1 TO SEPT. 1  =
SEPT. 1 TO OCT. 15 =
SEASON TOTAL       =
LONG TERM AVERAGE  =
```

Utilization 91.67
Production adjusted 191.07

```
20 33     JUN 29  RUNFERA...
              1503    NORTH  BUTTE  EXCL    JULY   23/75  INSIDE RELIC

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARTR      7.00 3.50E-01              1
  6    *OPPO      8.00 4.00E-01              1
  6    *PHHO      3.00 1.50E-01              1
   PER GRASS     61.50  3.07                19     219.02   11.53   3.56  [illegible]
  3    AGSP      45.60 2.28E+00 5.49E+01 19     191.56   10.08   4.20   9.1981E+02
  3    BOGR       0.30 1.50E-02 3.61E-01  1       1.76    1.76   5.87   8.4510E+00
  3    CAEL      13.50 6.75E-01 1.62E+01  9      25.02    2.78   1.85   1.2014E+02
  3    POSE       2.10 1.05E-01 2.53E+00  5       0.68    0.14   0.32   3.2652E+00
   PER FORBS     17.50  0.87                 3       9.59    3.20   0.55   46.05
  2    AST        5.00 2.50E-01 6.02E+00  2
  2    CYMO       3.00 1.50E-01 3.61E+00  2
  2    SPCC       4.50 2.25E-01 5.42E+00  3
  2    TRDU       5.00 2.50E-01 6.02E+00  1
   ANN GRASS      0.30  0.01                 1       1.29    1.29   4.30    6.19
  5    VUOC       0.30 1.50E-02 3.61E-01  1
   ANN FORBS      3.80  0.19                11       3.06    0.28   0.81   14.69
  4    DEPI       3.50 1.75E-01 4.21E+00 11
  4    PLPA       0.30 1.50E-02 3.61E-01  1
     TOTAL              5.05    100.00            2.3296E+02               1.1186E+03

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	64.72
OPPO	3.86
PHHO	2.92
Shrubs Prod.	71.50
Total	1,190.10

```
PRECIPITATION DATA
 RAIN GUAGE NC.        NORTH  BUTTE  EXCL    JULY   23/75
OCT. 15 TC APR. 15 =  5.18
APR. 15 TC JULY 1  =  8.81
JULY 1 TO SEPT. 1  =   .57
SEPT. 1 TC OCT. 15 =   .58
SEASON TOTAL       = 15.14
LCNG TERM AVERAGE  = 10.65
```

**No utilization

```
20 33   JUN 29  RUNHEBA...
           1504   ROUND   TOP     EXCL    JULY    23/75  INSIDE RELIC

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE   NAME    TRANS  PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
               BASAL  CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
               AREA   BASAL            BASE    SQ.FT.  OCCUR-  AREA
               PER-   AREA             20              RENCES
               CENT

 6    *ARTR    68.00 3.40E+00             2
 PER GRASS     61.80  3.09               16    207.48   12.97   3.36 996.26
 3    AGSM      0.20 T         2.72E-01   1      0.59    0.59   2.95   2.8330E+00
 3    AGSP     38.50 1.92E+00 5.23E+01  16    186.54   11.66   4.85   8.9571E+02
 3    CAEL     16.50 8.25E-01 2.24E+01  12     16.02    1.33   0.97   7.6923E+01
 3    KOCR      2.80 1.40E-01 3.80E+00   3      2.42    0.81   0.86   1.1620E+01
 3    POSE      3.80 1.90E-01 5.16E+00   6      1.91    0.32   0.50   9.1712E+00
 PER FORBS      5.50  0.27                2      1.83    0.91   0.33    8.79
 2    ALTE      3.00 1.50E-01 4.08E+00   2
 2    CRE       1.50 7.50E-02 2.04E+00   1
 2    ZYVE      1.00 5.00E-02 1.36E+00   1
 ANN FORBS      6.30  0.31               13      6.20    0.48   0.98   29.77
 4    DEPI      5.30 2.65E-01 7.20E+00  13
 4    UNK       1.00 5.00E-02 1.36E+00   1
    TOTAL             7.08    100.00          2.1551E+02              1.0348E+03

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		146.01
GUSA		3.31
	Shrub Prod.	149.32
	Total	1,184.12

```
PRECIPITATION DATA
 RAIN GUAGE NO.        ROUND  TOP     EXCL    JULY    23/75
OCT. 15 TO APR. 15 =   4.81
APR. 15 TO JULY 1  =   Vandalized
JULY 1 TO SEPT. 1  =   Vandalized
SEPT. 1 TO OCT. 15 =   Vandalized
SEASON TOTAL       =
LONG TERM AVERAGE  =  10.52
```

**No utilization

```
10 58    JUL 09   RUN5RAA...
            1505    SAND    GULCH   EXCL     JULY    16/75  INSIDE NATIVE

                                  NUMBER OF PLOTS
                          COVER = 200, PRODUCTION = 20
                             PLOT SIZE 1 FT. X 10 FT.
PLANT   PLANT   TOTAL   AVE.     PERCENT    ABS.     TOTAL    AVE.     WGT./    LBS
CODE    NAME    TRANS   PER-     COMPO-     PLOT     WGT.     WGT.     UNIT     PER
                BASAL   CENT     SITION     FREQ.    GMS/     /PLOT    BASAL    AC.
                AREA    BASAL               BASE     200      OCCUR-   AREA
                PER-    AREA                200      SQ.FT.   RENCES
                CENT

  6   *ARTR       0.4   T                      4
  1   ATNU     1873.3   9.37E+00 8.13E+01 89    1158.00     13.01    0.62   5.5604E+02
   PER GRASS    178.0   8.90E-01             157     768.46      4.89    4.32   3.6899E+02
  3   AGSM      159.3   7.96E-01 6.91E+00157     739.29      4.71    4.64   3.5498E+02
  3   BCGR        5.0   2.50E-02 2.17E-01   2       7.23      3.61    1.45   3.4716E+00
  3   CRHY        5.2   2.60E-02 2.26E-01  10      15.44      1.54    2.97   7.4138E+00
  3   PCSE        8.5   4.25E-02 3.69E-01  30       6.50      0.22    0.76   3.1211E+00
   PER FORBS    27.10   0.14                  12      12.53      1.04    0.46    6.02
  2   MAGL       25.0   1.25E-01 1.08E+00  12
  2   SPCO        2.1   1.05E-02 9.11E-02   4
   ANN GRASS   157.20   0.79                 180     972.96      5.41    6.19 467.19
  5   BRJA        4.4   2.20E-02 1.91E-01  22
  5   BRTE      152.8   7.64E-01 6.63E+00180
   ANN FORBS    69.40   0.35                  81      31.75      0.39    0.46  15.25
  4   CHAL       31.7   1.58E-01 1.38E+00  10
  4   CEPI        2.7   1.35E-02 1.17E-01  11
  4   LARE        7.2   3.60E-02 3.12E-01  39
  4   LEPE       22.6   1.13E-01 9.80E-01  81
  4   MCNU        1.4   T        6.07E-02  12
  4   SILI        3.8   1.90E-02 1.65E-01   8
      TOTAL              11.5      100.00          2.94370E+03               1.41347E+03

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

OPPO 10.54

~~Shrub Prod. 10.54~~

Total 1,424.01

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SAND   GULCH   EXCL    JULY    16/75
OCT. 15 TO APR. 15 =    2.49
APR. 15 TO JULY 1  =    6.32
JULY 1 TO SEPT. 1  =    NR
SEPT. 1 TO OCT. 15 =    2.05
SEASON TOTAL       =   10.86
LONG TERM AVERAGE  =    8.89
```

**No utilization

```
16 1C    JUL 01  RUNDJCA...
          1505   SAND    GULCH   EXCL    JULY   16/75  OUT     NATIVE

                        NUMBER CF PLOTS
                  COVER = 200, PRCDUCTICN = 20
                   PLCT SIZE 1 FT. X 10 FT.
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.   TOTAL  AVE.    WGT./  LBS
CCDE   NAME    TRANS  PER-   COMPC-   PLCT   WGT.   WGT.    UNIT   PER
               BASAL  CENT   SITICN   FREQ.  GMS/   /PLOT   BASAL  AC.
               AREA   BASAL           BASE   200    OCCUR-  AREA
               PER-   AREA            200    SQ.FT. RENCES
               CENT

  6  *CFPC     210.0  1.05E+00              22
  1  ATNU     1466.4  7.33E+00 7.19E+01104   678.08    6.52   0.46  3.2559E+02
 PER GRASS   204.4  1.02E+00             140   745.66    5.33   3.65  3.5804E+02
  3  AGSM      168.6  8.43E-01 8.27E+00140   702.91    5.02   4.17  3.3752E+02
  3  BCGR        5.6  2.80E-02 2.75E-01   4     8.02    2.00   1.43  3.8510E+00
  3  CRHY        5.6  2.80E-02 2.75E-01  10    17.66    1.77   3.15  8.4798E+00
  3  POSE       24.6  1.23E-01 1.21E+00  42    17.07    0.41   0.69  8.1965E+00
 PER FORBS      9.00   0.04                4     2.62    0.65   0.29   1.26
  2  MAGL        8.0  4.00E-02 3.92E-01   4
  2  SPCC        1.C  T        4.91E-02   2
 ANN GRASS   274.90   1.37               191   599.14    3.14   2.18 287.69
  5  BRTE      182.5  9.12E-01 8.95E+00191
  5  MUSQ       92.4  4.62E-01 4.53E+00  18
 ANN FCRBS    83.80   0.42                80    78.92    0.99   0.94  37.89
  4  CAMI        4.4  2.20E-02 2.16E-01  16
  4  CHAL        6.9  3.45E-02 3.38E-01  18
  4  CEPI        0.8  T        3.92E-02   4
  4  GIPU        0.8  T        3.92E-02   6
  4  LARE       11.8  5.90E-02 5.79E-01  68
  4  LECE       31.9  1.59E-01 1.56E+00  80
  4  LEPE       16.4  8.20E-02 8.05E-01  26
  4  MCNU        2.8  1.40E-02 1.37E-01  20
  4  PLSP        5.6  2.80E-02 2.75E-01  32
  4  SAKA        1.0  T        4.91E-02   2
  4  UNK1        1.4  T        6.87E-02   8
     TCTAL           11.2     100.00        2.10442E+03            1.01048E+03

      * NOT COMPUTED IN PERCENT COMPOSITICN
      T - TRACE

PRCDUCTICN ESTIMATES CF SHRUBS ANC WOODY MAT FORM PLANTS

      OPPO                                                           10.89
                                                   Shrub Prod.       10.89
                                                         Total    1,021.37


PRECIPITATION DATA
 RAIN GUACE NC.       SAND   GULCH  EXCL    JULY   16/75
CCT. 15 TC APR. 15 =   2.49
APR. 15 TC JULY 1  =   6.32
JULY 1 TC SEPT. 1  =   NR
SEPT. 1 TC OCT. 15 =   2.05
SEASCN TOTAL       =  10.86
LCNG TERM AVERAGE  =   8.89
```

**No utilization

```
20 33   JUN 29  RUNIEBA...
          1009   SHOSHO ANT NO EXCL 2 AUG     19/75  INSIDE NATIVE

                                    NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT  ABS.     TOTAL   AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-   PLOT     WGT.    WGT.     UNIT     PER
                 BASAL   CENT     SITION   FREQ.    GMS/20  /PLOT    BASAL    AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR    258.00 1.29E+01              6
  6    *OPPO     20.00 1.00E+00              3
   PER GRASS     43.40   2.17               13       66.83    5.14   1.54 320.90
  3    AGSM       0.90 4.50E-02 2.02E+00    2       10.22    5.11  11.36   4.9073E+01
  3    BOGR      30.60 1.53E+00 6.86E+01   13       43.54    3.35   1.42   2.0907E+02
  3    ORHY       0.80 4.00E-02 1.79E+00    2        1.26    0.63   1.57   6.0501E+00
  3    POSE       1.80 9.00E-02 4.04E+00    3        0.58    0.19   0.32   2.7850E+00
  3    SIHY       0.70 3.50E-02 1.57E+00    1        1.20    1.20   1.71   5.7620E+00
  3    STCO       8.60 4.30E-01 1.93E+01    4       10.03    2.51   1.17   4.8161E+01
   ANN FORBS      1.20  0.06                3        0.23    0.08   0.19    1.10
  4    DEPI       0.20 1.00E-02 4.48E-01    2
  4    LEDE       0.30 1.50E-02 6.73E-01    2
  4    UNK        0.30 1.50E-02 6.73E-01    2
  4    PLPA       0.40 2.00E-02 8.97E-01    3
     TOTAL             16.13    100.00           6.7060E+01                3.2200E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                                  265.03
        OPPO                                                                   26.45
        PHHO                                                                    1.81
                                                     Shrub Prod.              293.29
                                                           Total              615.29
PRECIPITATION DATA
 RAIN GUAGE NO.         SHOSHO ANT NO EXCL 2 AUG     19/75
OCT. 15 TO APR. 15 =   2.40
APR. 15 TO JULY 1  =   5.72
JULY 1 TO SEPT. 1  =    .67
SEPT. 1 TO OCT. 15 =    .49
SEASON TOTAL       =   9.28
LONG TERM AVERAGE  =   8.91

                                                            Utilization   60.83
                                                   Production Adjusted   676.12
```

```
20 34    JUN 29  RUNJEBA...
           1009   SHOSHO ANT SO EXCL 2 AUG     19/75  INSIDE NATIVE

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT  ABS.     TOTAL   AVE.    WGT./    LBS
CCDE    NAME     TRANS   PER-     COMPC-   PLOT     WGT.    WGT.    UNIT     PER
                 BASAL   CENT     SITION   FREQ.    GMS/20  /PLOT   BASAL    AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-  AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR    131.00 6.55E+00              11
  6    *OPPO     10.00 5.00E-01               1
   PER GRASS     33.60  1.68                 12      45.48    3.79   1.35  218.38
  3    AGSM       7.70 3.85E-01 2.13E+01     11      13.04    1.19   1.69   6.2614E+01
  3    BOGR      21.20 1.06F+00 5.87E+01     12      23.68    1.97   1.12   1.1370E+02
  3    POSE       0.80 4.00E-02 2.22F+00      2       0.65    0.32   0.81   3.1211E+00
  3    STCC       3.90 1.95E-01 1.08E+01      4       8.11    2.03   2.08   3.8942E+01
   PER FORBS      2.10  0.10                  3       0.77    0.26   0.37    3.70
  2    ALTE       0.50 2.50E-02 1.39E+00      1
  2    ERPU       0.40 2.00E-02 1.11E+00      2
  2    LUPU       0.30 1.50E-02 8.31E-01      1
  2    SPCC       0.90 4.50E-02 2.49E+00      3
   ANN FORBS      0.40  0.02                  1       0.66    0.66   1.65    3.17
  4    DEPI       0.20 T        5.54E-01      1
  4    PLPA       0.10 T        2.77E-01      1
  4    UNK        0.10 T        2.77E-01      1
     TOTAL              8.85    100.00              4.6910E+01              2.2525E+02

        * NOT COMPUTED IN PERCENT COMPOSITICN
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		265.03
OPPO		26.45
	Shrub Prod.	293.29
	Total	615.29

```
PRECIPITATION DATA
 RAIN GUAGE NC.          SHOSHO ANT SO EXCL 2 AUG     19/75
OCT. 15 TC APR. 15 =   2.40
APR. 15 TC JULY 1  =   5.72
JULY 1 TO SEPT. 1  =    .67
SEPT. 1 TC OCT. 15 =    .49
SEASCN TOTAL       =   9.28
LCNG TERM AVERAGE  =   8.91
```

**No utilization

```
20 34    JUN 29  RUNKEBA...
             1009    SHOSHO ANT      EXCL 2 AUG      19/75  OUT      NATIVE

                                     NUMBER PLOTS = 20
                                        PLOT SIZE 1X1
PLANT    PLANT     TOTAL    AVE.     PERCENT    ABS.     TOTAL   AVE.     WGT./    LBS
CODE     NAME      TRANS    PER-     COMPO-     PLOT     WGT.    WGT.     UNIT     PER
                   BASAL    CENT     SITION     FREQ.    GMS/20  /PLOT    BASAL    AC.
                   AREA     BASAL               BASE     SQ.FT.  OCCUR-   AREA
                   PER-     AREA                20               RENCES
                   CENT

  6     *ARTR     186.00  9.30E+00              11
  6     *OPPO      17.00  8.50E-01               2
  6     *PHHO       9.00  4.50E-01               1
   PER GRASS       30.50   1.52                 15        51.78     3.45    1.70  248.63
  3      AGSM       5.00  2.50E-01  1.37E+01    11        13.91     1.26    2.78  6.6792E+01
  3      BOGR      17.80  8.90E-01  4.88E+01    15        24.41     1.63    1.37  1.1721E+02
  3      POSE       4.10  2.05E-01  1.12E+01     6         2.25     0.37    0.55  1.0804E+01
  3      SIHY       0.60  3.00E-02  1.64E+00     1         0.91     0.91    1.52  4.3695E+00
  3      STCC       3.00  1.50E-01  8.22E+00     1        10.30    10.30    3.43  4.9457E+01
   PER FORBS        2.80   0.14                  3         1.41     0.47    0.50    6.77
  2      SPCC       2.80  1.40E-01  7.67E+00     3
   ANN GRASS        1.60   0.08                  3         0.36     0.12    0.22    1.73
  5      VUOC       1.60  8.00E-02  4.38E+00     3
   ANN FORBS        1.60   0.08                  5         0.46     0.09    0.29    2.21
  4      LEDE       0.50  2.50E-02  1.37E+00     3
  4      PLPA       0.90  4.50E-02  2.47E+00     5
  4      UNK        0.20  1.00E-02  5.48E-01     2
     TOTAL                 12.42      100.00             5.4010E+01                2.5934E+02

         * NOT COMPUTED IN PERCENT COMPOSITION
         T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	273.17
OPPO	25.22
PHHO	4.41
Shrub Prod.	302.80
Total	562.14

```
PRECIPITATION DATA
 RAIN GUAGE NO.          SHOSHO ANT     EXCL 2 AUG     19/75
OCT. 15 TO APR. 15 =    2.40
APR. 15 TO JULY 1  =    5.72
JULY 1 TO SEPT. 1  =     .67
SEPT. 1 TO OCT. 15 =     .49
SEASON TOTAL       =    9.28
LONG TERM AVERAGE  =    8.91
```

Utilization	199.87
Production Adjusted	762.01

```
20 34   JUN 29  RUNLEBA...
          1011   SHOSHO ANT NO EXCL 4 AUG    20/75  INSIDE NATIVE

                     NUMBER PLOTS = 20
                       PLOT SIZE 1X1
PLANT PLANT  TOTAL AVE.     PERCENT ABS.  TOTAL  AVE.  WGT./  LBS
CODE  NAME   TRANS PER-     COMPO-  PLOT  WGT.   WGT.  UNIT   PER
             BASAL CENT     SITION  FREQ. GMS/20 /PLOT BASAL  AC.
             AREA  BASAL            BASE  SQ.FT. OCCUR- AREA
             PER-  AREA             20           RENCES
             CENT

  6  *ARTR  138.00 6.90E+00           8
  6  *OPPO   12.00 6.00E-01           3
   PER GRASS 20.90  1.04             15   36.48  2.43   1.75 175.17
  3  AGSM     5.70 2.85E-01 2.14E+01 15   14.00  0.93   2.46  6.7224E+01
  3  BOGR     7.10 3.55E-01 2.67E+01  9    8.43  0.94   1.19  4.0478E+01
  3  ORHY     3.00 1.50E-01 1.13E+01  1    4.78  4.78   1.59  2.2952E+01
  3  POSE     3.30 1.65E-01 1.24E+01 10    2.42  0.24   0.73  1.1620E+01
  3  STCC     1.80 9.00E-02 6.77E+00  2    6.85  3.42   3.81  3.2892E+01
   PER FORBS  4.80  0.24              8    3.24  0.40   0.67  15.56
  2  SPCC     4.80 2.40E-01 1.80E+01  8
   ANN FORBS  0.90  0.04              3    0.74  0.25   0.82   3.55
  4  LEDE     0.20 1.00E-02 7.52E-01  2
  4  LUPU     0.30 1.50E-02 1.13E+00  1
  4  PLPA     0.30 1.50E-02 1.13E+00  3
  4  UNK      0.10 T        3.76E-01  1
    TOTAL          8.83    100.00        4.0460E+01           1.9428E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


      ARTR                                                        277.47
      OPPO                                                         26.96
      PHHO                                                          4.71
                                                    Shrub Prod.   309.14
                                                          Total   503.42

PRECIPITATION DATA
 RAIN GUAGE NO.      SHOSHO ANT NO EXCL 4 AUG    20/75
OCT. 15 TO APR. 15 =   2.28
APR. 15 TO JULY 1  =   5.15
JULY 1 TO SEPT. 1  =    .32
SEPT. 1 TO OCT. 15 =    .58
SEASON TOTAL       =   8.33
LONG TERM AVERAGE  =   8.22

      **No utilization
```

```
            1011    SHOSHO ANT SO EXCL 4 AUG     20/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT     PER
                 BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL    AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR     86.00 4.30E+00             4
  6    *OPPO     73.00 3.65E+00             5
   PER GRASS     31.50  1.57               11       39.30    3.57    1.25 188.71
  3    AGSM       3.70 1.85E-01 1.01E+01   11        8.77    0.80    2.37   4.2111E+01
  3    BOGR      18.80 9.40E-01 5.12E+01   10       20.94    2.09    1.11   1.0055E+02
  3    POSE       2.90 1.45E-01 7.90E+00    7        1.30    0.19    0.45   6.2422E+00
  3    STCO       6.10 3.05E-01 1.66E+01    5        8.29    1.66    1.36   3.9806E+01
   PER FORBS      0.90  0.04                3        1.08    0.36    1.20     5.19
  2    SPCO       0.90 4.50E-02 2.45E+00    3
   ANN FORBS      4.30  0.21                5        0.54    0.11    0.13     2.59
  4    BRA        0.10 T        2.72E-01    1
  4    LEDE       0.70 3.50E-02 1.91E+00    5
  4    PLPA       3.30 1.65E-01 8.99E+00    3
  4    UNK        0.20 1.00E-02 5.45E-01    2
     TOTAL              9.78    100.00             4.0920E+01                 1.9649E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                                  277.47
        OPPO                                                                   26.96
        PHHO                                                                    4.71
                                                         Shrub Prod.          309.14
                                                               Total          503.42
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT SO EXCL 4 AUG     20/75
OCT. 15 TO APR. 15 =    2.28
APR. 15 TO JULY 1  =    5.15
JULY 1 TO SEPT. 1  =     .32
SEPT. 1 TO OCT. 15 =     .58
SEASON TOTAL       =    8.33
LONG TERM AVERAGE  =    8.22

                                                            Utilization    57.01
                                                    Production Adjusted   560.43
        1011   SHOSHO ANT    EXCL 4 AUG    20/75  OUT    NATIVE

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE   NAME    TRANS  PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
               BASAL  CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
               AREA   BASAL            BASE    SQ.FT.  OCCUR-  AREA
               PER-   AREA             20              RENCES
               CENT

 6   *ARTR    27.00 1.35E+00              1
  PER GRASS   45.10  2.25                18     51.35   2.85   1.14 246.57
 3   AGSM      0.60 3.00E-02 1.18E+00     2      0.68   0.34   1.13  3.2652E+00
 3   BOGR     35.70 1.78E+00 7.04E+01    18     45.76   2.54   1.28  2.1973E+02
 3   POSE      5.60 2.80E-01 1.10E+01    12      1.62   0.13   0.29  7.7787E+00
 3   STCC      3.20 1.60E-01 6.31E+00     2      3.29   1.64   1.03  1.5798E+01
  PER FORBS    4.10  0.20                 9      3.00   0.33   0.73  14.41
 2   SPCC      4.10 2.05E-01 8.09E+00     9
  ANN GRASS    0.20  0.01                 1      0.09   0.09   0.45   0.43
 5   VUOC      0.20 T        3.94E-01     1
  ANN FORBS    1.30  0.06                 5      0.49   0.10   0.38   2.35
 4   DEPI      0.10 T        1.97E-01     1
 4   LEDE      0.20 1.00E-02 3.94E-01     2
 4   LUPU      0.30 1.50E-02 5.92E-01     1
 4   PLPA      0.70 3.50E-02 1.38E+00     5
    TOTAL           3.88    100.00            5.4930E+01                 2.6376E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		275.40
OPPO		40.50
PHHO		2.09
	Shrub Prod.	317.99
	Total	581.75

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT    EXCL 4 AUG    20/75
OCT. 15 TO APR. 15 =   2.28
APR. 15 TO JULY 1  =   5.15
JULY 1 TO SEPT. 1  =    .32
SEPT. 1 TO OCT. 15 =    .58
SEASON TOTAL       =   8.33
LONG TERM AVERAGE  =   8.22
```

**No utilization

```
20 34   JUN 29  RUNMEBA...
        1003    SHOSHO ANT NO EXCL 7 AUGUST 20/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT    PLANT    TOTAL    AVE.    PERCENT    ABS.     TOTAL    AVE.     WGT./    LBS
CODE     NAME     TRANS    PER-    COMPO-     PLOT     WGT.     WGT.     UNIT     PER
                  BASAL    CENT    SITION     FREQ.    GMS/20   /PLOT    BASAL    AC.
                  AREA     BASAL              BASE     SQ.FT.   OCCUR-   AREA
                  PER-     AREA               20                RENCES
                  CENT

  6     *ARTR     159.00 7.95E+00               9
  6     *OPPO      34.00 1.70E+00               4
  6     *PHHO      13.00 6.50E-01               2
   PER GRASS       23.30  1.16                 20       28.14     1.41     1.21  135.12
  3      AGSM       8.00 4.00E-01 3.13E+01 20       16.11     0.81     2.01   7.7355E+01
  3      BOGR       4.80 2.40E-01 1.88E+01  5        4.83     0.97     1.01   2.3192E+01
  3      POSE       3.90 1.95E-01 1.52E+01 11        1.77     0.16     0.45   8.4990E+00
  3      STCO       6.60 3.30E-01 2.58E+01  3        5.43     1.81     0.82   2.6073E+01
   PER FORBS        2.00  0.10                  2        0.15     0.07     0.07    0.72
  2      ALTF       2.00 1.00E-01 7.81E+00  2
   ANN FORBS        0.30  0.01                  2        0.10     0.05     0.33    0.48
  4      PLPA       0.30 1.50E-02 1.17E+00  2
     TOTAL               11.58    100.00            2.8390E+01                1.3632E+02

     * NOT COMPUTED IN PERCENT COMPOSITION
     T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		290.95
OPPO		32.16
PHHO		8.55
	Shrub Prod.	331.66
	Total	467.98

```
PRECIPITATION DATA
 RAIN GUAGE NO.          SHOSHO ANT NO EXCL 7 AUGUST 20/75
OCT. 15 TO APR. 15 =   2.18
APR. 15 TO JULY 1  =   5.80
JULY 1 TO SEPT. 1  =    .49
SEPT. 1 TO OCT. 15 =    .48
SEASON TOTAL       =   8.95
LONG TERM AVERAGE  =   8.86
```

**No utilization

```
        1003   SHOSHO ANT SO EXCL 7 AUGUST 20/75  INSIDE NATIVE

                                 NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.   TOTAL  AVE.   WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT   WGT.   WGT.   UNIT   PER
               BASAL  CENT   SITION   FREQ.  GMS/20 /PLOT  BASAL  AC.
               AREA   BASAL           BASE   SQ.FT. OCCUR- AREA
               PER-   AREA            20            RENCES
               CENT

  6   *ARTR   138.00 6.90E+00           8
  6   *OPPO    26.00 1.30E+00           3
  6   *PHHO     6.00 3.00E-01           1
   PER GRASS   19.40  0.97             18     27.35    1.52   1.41 131.33
  3    AGSM     7.10 3.55E-01 3.43E+01 18     13.80    0.77   1.94  6.6263E+01
  3    BOGR     4.90 2.45E-01 2.37E+01  6      6.58    1.10   1.34  3.1595E+01
  3    POSE     3.60 1.80E-01 1.74E+01 10      1.29    0.13   0.36  6.1942E+00
  3    STCC     3.80 1.90E-01 1.84E+01  5      5.68    1.14   1.49  2.7274E+01
   ANN GRASS    0.10  0.00              1      0.04    0.04   0.40   0.19
  5    BRTE     0.10 T        4.83E-01  1
   ANN FORBS    1.20  0.06              4      0.70    0.17   0.58   3.36
  4    LEDE     0.10 T        4.83E-01  1
  4    PLPA     0.90 4.50E-02 4.35E+00  4
  4    UNK      0.20 T        9.66E-01  1
    TOTAL             9.53    100.00          2.8090E+01             1.3488E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		290.95
OPPO		32.16
PHHO		8.55
	Shrub Prod.	331.66
	Total	467.98

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT SO EXCL 7 AUGUST 20/75
OCT. 15 TO APR. 15 =   2.18
APR. 15 TO JULY 1  =   5.80
JULY 1 TO SEPT. 1  =    .49
SEPT. 1 TO OCT. 15 =    .48
SEASON TOTAL       =   8.95
LONG TERM AVERAGE  =   8.86
```

**No utilization

```
        1013   SHOSHO ANT     EXCL 7 AUG     20/76  OUT      NATIVE

                                   NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20               RENCES
                 CENT

  6    *ARTR    286.00 1.43E+01            14
   PER GRASS     26.60  1.33               14        30.53   2.18    1.15 146.60
  3     AGSM      4.30 2.15E-01 1.34E+01  14        11.55   0.82    2.69  5.5460E+01
  3     BOGR     10.30 5.15E-01 3.22E+01   8         8.35   1.04    0.81  4.0094E+01
  3     ORHY      1.00 5.00E-02 3.13E+00   1         2.15   2.15    2.15  1.0324E+01
  3     POSE      5.20 2.60E-01 1.63E+01  14         1.87   0.13    0.36  8.9792E+00
  3     SIHY      0.90 4.50E-02 2.81E+00   2         0.64   0.32    0.71  3.0731E+00
  3     STCO      4.90 2.45E-01 1.53E+01   6         5.97   0.99    1.22  2.8666E+01
   PER FORBS      1.20  0.06                1         1.42   1.42    1.18    6.82
  2     ERPU      1.20 6.00E-02 3.75E+00   1
   ANN GRASS      0.80  0.04                4         0.14   0.03    0.17    0.67
  5     BRTE      0.60 3.00E-02 1.88E+00   4
   ANN FORBS      3.40  0.17                4         2.80   0.70    0.82   13.44
  4     LEDE      0.60 3.00E-02 1.88E+00   4
  4     LUPU      1.80 9.00E-02 5.63E+00   2
  4     PLPA      1.00 5.00E-02 3.13E+00   3
  5     UNK       0.20 T        6.25E-01   1
     TOTAL             15.90    100.00           3.4890E+01              1.6753E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE
```

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

ARTR		300.95
OPPO		44.28
PHHO		2.45
	Shrub Prod.	347.68
	Total	515.21

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT     EXCL 7 AUG     20/76
OCT. 15 TO APR. 15 =    2.18
APR. 15 TO JULY 1  =    5.80
JULY 1 TO SEPT. 1  =     .49
SEPT. 1 TO OCT. 15 =     .48
SEASON TOTAL       =    8.95
LONG TERM AVERAGE  =    8.86
```

Utilization	61.00
Production Adjusted	576.21

```
20 34    JUN 29  RUNPEBA...
            1014    SHOSHO ANT NO EXCL 8 AUG     22/75  INSIDE NATIVE

                               NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.     WGT./    LBS
CCDE    NAME    TRANS   PER-    COMPC-   PLOT    WGT.    WGT.     UNIT     PER
                BASAL   CENT    SITICN   FREQ.   GMS/20  /PLOT    BASAL    AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-   AREA
                PER-    AREA             20              RENCES
                CENT

  6    *ARTR    62.00 3.10E+00            6
  6    *OPPO    31.00 1.55E+00            5
   PER GRASS    22.20  1.11              20      41.35    2.07    1.86 198.55
  3    AGSM     12.00 6.00E-01 4.72E+01  20      29.91    1.50    2.49  1.4362E+02
  3    BOCR      3.40 1.70E-01 1.34E+01   7       3.68    0.53    1.08  1.7670E+01
  3    POSE      3.00 1.50E-01 1.18E+01   8       1.32    0.16    0.44  6.3382E+00
  3    STCC      3.80 1.90E-01 1.50E+01   4       6.44    1.61    1.69  3.0923E+01
   PER FORBS     2.20  0.11               2       1.61    0.80    0.73    7.73
  2    SPCC      2.20 1.10E-01 8.66E+00   2
   ANN FORBS     1.00  0.05               5       0.59    0.12    0.59    2.83
  4    LEDE      0.20 1.00E-02 7.87E-01   2
  4    PLPA      0.80 4.00E-02 3.15E+00   5
     TOTAL            5.92     100.00            4.3550E+01             2.0911E+02

      * NOT COMPUTED IN PERCENT COMPOSITICN
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	209.40
OPPO	22.95
PHHO	0.75
Shrub Prod.	233.09
Total	442.20

```
PRECIPITATION DATA
 RAIN GUAGE NC.          SHOSHO ANT NO EXCL 8 AUG     22/75
OCT. 15 TC APR. 15 =   2.15
APR. 15 TC JULY 1  =   5.82
JULY 1 TO SEPT. 1  =    .48
SEPT. 1 TC OCT. 15 =    .58
SEASCN TOTAL       =   9.04
LCNG TERM AVERAGE  =   8.41
```

**No utilization

```
          1014   SHOSHO ANT SO EXCL 8 AUG     22/75  INSIDE NATIVE

                                NUMBER PLOTS = 20
                                  PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARTR    143.00 7.15E+00              7
  6    *OPPO     42.00 2.10E+00              3
   PER GRASS     37.20  1.86                15      78.01     5.20   2.10 374.58
  3     AGSM      3.90 1.95E-01 1.00E+01     9      10.71     1.19   2.75  5.1426E+01
  3     BOGR      4.90 2.45E-01 1.26E+01     6       7.09     1.18   1.45  3.4044E+01
  3     ORHY      1.30 6.50E-02 3.34E+00     1       4.79     4.79   3.68  2.3000E+01
  3     POSE      2.60 1.30E-01 6.68E+00     9       1.02     0.11   0.39  4.8977E+00
  3     STCC     24.50 1.22E+00 6.30E+01    15      54.40     3.63   2.22  2.6121E+02
   PER FORBS      0.70  0.03                 2       0.21     0.10   0.30   1.01
  2     SPCC      0.70 3.50E-02 1.80E+00     2
   ANN FORBS      1.00  0.05                 6       0.56     0.09   0.56   2.69
  4     PLPA      1.00 5.00E-02 2.57E+00     6
     TOTAL            11.19    100.00             7.8780E+01                 3.7828E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		209.40
OPPO		22.95
PHHO		0.75
	Shrub Prod.	233.09
	Total	442.20

```
PRECIPITATION DATA
 RAIN GUAGE NO.         SHOSHO ANT SC EXCL 8 AUG     22/75
OCT. 15 TO APR. 15 =   2.15
APR. 15 TO JULY 1  =   5.82
JULY 1 TO SEPT. 1  =    .48
SEPT. 1 TO OCT. 15 =    .58
SEASON TOTAL       =   9.04
LONG TERM AVERAGE  =   8.41
```

**No utilization

```
        1014   SHOSHO ANT    EXCL 8 AUG    22/75  OUT    NATIVE

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.   TOTAL   AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT   WGT.    WGT.    UNIT   PER
               BASAL  CENT   SITION   FREQ.  GMS/20  /PLOT   BASAL  AC.
               AREA   BASAL           BASE   SQ.FT.  OCCUR-  AREA
               PER-   AREA            20             RENCES
               CENT

 6    *ARTR   195.00 9.75E+00           10
 6    *OPPO    47.00 2.35E+00            5
 6    *PHHO     2.00 1.00E-01            1
  PER GRASS    22.90  1.14              17     36.87    2.17    1.61 177.04
 3     AGSM     7.90 3.95E-01 2.98E+01 17     19.42    1.14    2.46  9.3249E+01
 3     BOGR     8.00 4.00E-01 3.02E+01  5      7.85    1.57    0.98  3.7693E+01
 3     POSE     3.40 1.70E-01 1.28E+01  7      1.18    0.17    0.35  5.6660E+00
 3     STCC     3.60 1.80E-01 1.36E+01  4      8.42    2.10    2.34  4.0430E+01
  ANN FORBS     3.60  0.18               8      1.52    0.19    0.42    7.30
 4     DEPI     0.10 T        3.77E-01  1
 4     LEDE     0.10 T        3.77E-01  1
 4     PLPA     3.40 1.70E-01 1.28E+01  8
     TOTAL          13.52    100.00          3.8390E+01              1.8434E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		208.24
OPPO		35.74
PHHO		1.97
	Shrub Prod.	245.95
	Total	430.29

```
PRECIPITATION DATA
 RAIN GUAGE NO.         SHOSHO ANT    EXCL 8 AUG    22/75
OCT. 15 TO APR. 15 =   2.15
APR. 15 TO JULY 1  =   5.82
JULY 1 TO SEPT. 1  =    .48
SEPT. 1 TO OCT. 15 =    .58
SEASON TOTAL       =   9.04
LONG TERM AVERAGE  =   8.41
```

Utilization	147.04
Production Adjusted	377.33

```
20 35   JUN 29  RUNOEBA...
          1015   SHOSHO ANT NO EXCL 9 AUG    21/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.     WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT     WGT.    WGT.     UNIT    PER
                BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT    BASAL   AC.
                AREA    BASAL             BASE     SQ.FT.  OCCUR-   AREA
                PER-    AREA              20               RENCES
                CENT

  6    *ARTR    182.00  9.10E+00          8
  6    *OPPO     23.00  1.15E+00          2
  6    *PHHO      5.50  2.75E-01          2
  PER GRASS      24.30   1.21            16       33.27     2.08    1.37 159.75
  3     AGSM      5.00  2.50E-01 2.02E+01 16       15.65     0.98    3.13  7.5146E+01
  3     BOGR      9.20  4.60E-01 3.71E+01  8        9.28     1.16    1.01  4.4560E+01
  3     CAEL      0.70  3.50E-02 2.82E+00  3        0.26     0.09    0.37  1.2484E+00
  3     CAFI      4.00  2.00E-01 1.61E+01  1        4.93     4.93    1.23  2.3672E+01
  3     POSE      2.80  1.40E-01 1.13E+01  7        0.80     0.11    0.29  3.8414E+00
  3     STCO      2.60  1.30E-01 1.05E+01  4        2.35     0.59    0.90  1.1284E+01
  ANN FORBS      0.50   0.02              3        0.61     0.20    1.22   2.93
  4     PLPA      0.50  2.50E-02 2.02E+00  3
     TOTAL              11.76   100.00           3.3880E+01               1.6268E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		245.86
OPPO		43.10
	Shrub Prod.	293.81
	Total	456.49

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT NO EXCL 9 AUG     21/75
OCT. 15 TO APR. 15 =    2.28
APR. 15 TO JULY 1  =    5.30
JULY 1 TO SEPT. 1  =     .62
SEPT. 1 TO OCT. 15 =     .51
SEASON TOTAL       =    8.71
LONG TERM AVERAGE  =    8.43
```

**No utilization

```
       1015   SHOSHO ANT SO EXCL 9 AUG     21/75  INSIDE NATIVE

                                   NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.     PERCENT   ABS.     TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-     COMPO-    PLOT     WGT.    WGT.    UNIT    PER
                BASAL   CENT     SITION    FREQ.    GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL              BASE     SQ.FT.  OCCUR-  AREA
                PER-    AREA               20               RENCES
                CENT

  6    *ARTR    230.00 1.15E+01            10
  6    *OPPO    118.00 5.90E+00             6
  6    *PHHO      2.00 1.00E-01             1
   PER GRASS     22.50  1.12               17     29.91     1.76    1.33  143.62
  3     AGSM      6.20 3.10E-01 2.73E+01   17     15.89     0.93    2.56  7.6299E+01
  3     BOGR      8.80 4.40E-01 3.88E+01    7      9.30     1.33    1.06  4.4656E+01
  3     CAEL      0.50 2.50E-02 2.20E+00    2      0.39     0.19    0.78  1.8727E+00
  3     POSE      4.60 2.30E-01 2.03E+01    9      1.37     0.15    0.30  6.5783E+00
  3     STCO      2.40 1.20E-01 1.06E+01    3      2.96     0.99    1.23  1.4213E+01
   ANN FORBS      0.20  0.01                1      0.07     0.07    0.35    0.34
  4     PLPA      0.20 T          8.81E-01  1
     TOTAL              18.63    100.00           2.9980E+01              1.4395E+02

          * NOT COMPUTED IN PERCENT COMPOSITION
          T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		245.86
OPPO		43.10
PHHO		4.85
	Shrub Prod.	293.81
	Total	456.49

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT SO EXCL 9 AUG     21/75
OCT. 15 TO APR. 15 =   2.28
APR. 15 TO JULY 1  =   5.30
JULY 1 TO SEPT. 1  =    .62
SEPT. 1 TO OCT. 15 =    .51
SEASON TOTAL       =   8.71
LONG TERM AVERAGE  =   8.43
```

**No utilization

```
          1015    SHOSHO ANT     EXCL 9 AUG     21/75   OUT     NATIVE

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL  AVE.     PERCENT   ABS.     TOTAL   AVE.    WGT./   LBS
CODE    NAME     TRANS  PER-     COMPO-    PLOT     WGT.    WGT.    UNIT    PER
                 BASAL  CENT     SITION    FREQ.    GMS/20  /PLOT   BASAL   AC.
                 AREA   BASAL              BASE     SQ.FT.  OCCUR-  AREA
                 PER-   AREA               20               RENCES
                 CENT

  6    *ARTR    196.00 9.80E+00            12
  6    *OPPO     26.00 1.30E+00             4
  6    *PHHO      6.00 3.00E-01             3
   PER GRASS     16.10  0.80               20     23.63     1.18    1.47 113.46
  3     AGSM      8.80 4.40E-01 4.47E+01   20     20.43     1.02    2.32   9.8099E+01
  3     BOGR      1.80 9.00E-02 9.14E+00    5      1.63     0.33    0.91   7.8268E+00
  3     POSE      4.90 2.45E-01 2.49E+01   12      1.20     0.10    0.24   5.7620E+00
  3     STCO      0.60 3.00E-02 3.05E+00    2      0.37     0.18    0.62   1.7766E+00
   PER FORBS      0.60  0.03                2      0.11     0.05    0.18    0.53
  2     SPCO      0.60 3.00E-02 3.05E+00    2
   ANN FORBS      3.00  0.15                9      1.90     0.21    0.63    9.12
  4     LEDE      0.10 T        5.08E-01    1
  4     PLPA      2.90 1.45E-01 1.47E+01    9
      TOTAL           12.38    100.00            2.5640E+01                1.2312E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	290.49
OPPO	16.59
PHHO	15.59
Shrub Prod.	322.67
Total	445.79

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT     EXCL 9 AUG     21/75
OCT. 15 TO APR. 15 =   2.28
APR. 15 TO JULY 1  =   5.30
JULY 1 TO SEPT. 1  =    .62
SEPT. 1 TO OCT. 15 =    .51
SEASON TOTAL       =   8.71
LONG TERM AVERAGE  =   8.43
```

**No utilization

```
20 36   JUN 29  RUNREBA...
          1017   SHOSHO ANT NO EXCL11 AUG     21/75  INSIDE NATIVE

                                   NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT  PLANT    TOTAL   AVE.     PERCENT  ABS.      TOTAL  AVE.     WGT./   LBS
CODE   NAME     TRANS   PER-     COMPO-   PLOT      WGT.   WGT.     UNIT    PER
                BASAL   CENT     SITION   FREQ.     GMS/20 /PLOT    BASAL   AC.
                AREA    BASAL             BASE      SQ.FT. OCCUR-   AREA
                PER-    AREA              20               RENCES
                CENT

  6    *ARTR    116.00 5.80E+00               5
  6    *OPPO     26.00 1.30E+00               3
   PER GRASS     26.10  1.30                 13       43.41    3.34    1.66 208.44
  3     AGSM      7.70 3.85E-01 2.82E+01 12       16.15    1.35    2.10  7.7547E+01
  3     BOGR     10.50 5.25E-01 3.85E+01 10       17.18    1.72    1.64  8.2493E+01
  3     ORHY      0.70 3.50E-02 2.56E+00  1        1.26    1.26    1.80  6.0501E+00
  3     POSE      4.90 2.45E-01 1.79E+01 13        3.94    0.30    0.80  1.8919E+01
  3     STCC      2.30 1.15E-01 8.42E+00  2        4.88    2.44    2.12  2.3432E+01
   PER FORBS      0.90  0.04                  2        0.21    0.10    0.23    1.01
  2     ALTE      0.20 T        7.33E-01  1
  2     ERPU      0.30 1.50E-02 1.10E+00  1
  2     SPCC      0.40 2.00E-02 1.47E+00  2
   ANN GRASS      0.20  0.01                  1        0.02    0.02    0.10    0.10
  5     VUOC      0.20 T        7.33E-01  1
   ANN FORBS      0.10  0.00                  1        0.02    0.02    0.20    0.10
  4     UNK       0.10 T        3.66E-01  1
     TOTAL             8.46     100.00            4.3660E+01               2.0964E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		239.58
OPPO		24.79
	Shrub Prod.	264.37
	Total	473.83

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SHOSHO ANT NO EXCL11 AUG     21/75
OCT. 15 TO APR. 15 =    2.20
APR. 15 TO JULY 1  =    5.85
JULY 1 TO SEPT. 1  =     .76
SEPT. 1 TO OCT. 15 =     .53
SEASON TOTAL       =    9.34
LONG TERM AVERAGE  =    8.62
```

**No utilization

```
        1017   SHOSHO ANT SO EXCL11 AUG    21/75  INSIDE NATIVE

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.    TOTAL  AVE.   WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT    WGT.   WGT.   UNIT   PER
               BASAL  CENT   SITION   FREQ.   GMS/20 /PLOT  BASAL  AC.
               AREA   BASAL           BASE    SQ.FT. OCCUR- AREA
               PER-   AREA            20             RENCES
               CENT

  6   *ARTR    226.00 1.13E+01           13
  6   *OPPO     15.00 7.50E-01            2
 PER GRASS     25.10  1.25               14      32.63   2.33   1.30 156.68
  3    AGSM     8.50 4.25E-01 2.82E+01 14      15.50   1.11   1.82  7.4426E+01
  3    BOGR     7.90 3.95E-01 2.62E+01  9      10.03   1.11   1.27  4.8161E+01
  3    POSE     6.30 3.15E-01 2.09E+01 11       2.63   0.24   0.42  1.2628E+01
  3    STCC     2.40 1.20E-01 7.97E+00  2       4.47   2.23   1.86  2.1464E+01
 PER FORBS      4.60  0.23                6       3.35   0.56   0.73  16.09
  2    SPCC     4.60 2.30E-01 1.53E+01  6
 ANN FORBS      0.40  0.02                2       0.16   0.08   0.40   0.77
  4    DEPI     0.20 T        6.64E-01  1
  4    PLPA     0.20 1.00E-02 6.64E-01  2
    TOTAL            13.55    100.00          3.6140E+01               1.7353E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		239.58
OPPO		24.79
	Shrub Prod.	264.34
	Total	473.83

```
PRECIPITATION DATA
 RAIN GUAGE NO.       SHOSHO ANT SO EXCL11 AUG    21/75
OCT. 15 TO APR. 15 =   2.20
APR. 15 TO JULY 1  =   5.85
JULY 1 TO SEPT. 1  =    .76
SEPT. 1 TO OCT. 15 =    .53
SEASON TOTAL       =   9.34
LONG TERM AVERAGE  =   8.62
```

**No utilization

```
         1017   SHOSHO ANT    EXCL11 AUG    21/75  OUT    NATIVE

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL    AVE.     WGT./    LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.     WGT.     UNIT     PER
                BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT     BASAL    AC.
                AREA    BASAL             BASE    SQ.FT.  OCCUR-    AREA
                PER-    AREA              20              RENCES
                CENT

  6    *ARTR   341.00 1.70E+01             14
  6    *OPPO    21.00 1.05E+00              2
  6    *PHHO    24.00 1.20E+00              2
   PER GRASS    19.80  0.99                20     30.76    1.54    1.55 147.70
  3     AGSM     8.80 4.40E-01 4.09E+01 20     22.70    1.13    2.58  1.0900E+02
  3     BOGR     4.00 2.00E-01 1.86E+01  6      4.18    0.70    1.04  2.0071E+01
  3     ORHY     0.70 3.50E-02 3.26E+00  1      0.44    0.44    0.63  2.1127E+00
  3     POSE     6.00 3.00E-01 2.79E+01 13      2.29    0.18    0.38  1.0996E+01
  3     STCC     0.30 1.50E-02 1.40E+00  1      1.15    1.15    3.83  5.5219E+00
   PER FORBS     0.50  0.02                 1      0.00    0.00    0.00    0.00
  2     ASPY     0.20 T        9.30E-01  1
  2     SPCC     0.30 1.50E-02 1.40E+00  1
   ANN FORBS     1.20  0.06                 4      0.51    0.13    0.42    2.45
  4     DEPE     0.40 2.00E-02 1.86E+00  2
  4     LEDE     0.10 T        4.65E-01  1
  4     PLPA     0.70 3.50E-02 3.26E+00  4
    TOTAL             20.37    100.00          3.1270E+01                1.5015E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		314.30
OPPO		44.55
	Shrub Prod.	361.85
	Total	512.00

```
PRECIPITATION DATA
 RAIN GUAGE NO.         SHOSHO ANT    EXCL11 AUG    21/75
OCT. 15 TO APR. 15 =    2.20
APR. 15 TO JULY 1  =    5.85
JULY 1 TO SEPT. 1  =     .76
SEPT. 1 TO OCT. 15 =     .53
SEASON TOTAL       =    9.34
LONG TERM AVERAGE  =    8.62
```

**No utilization

```
         2009   SMILO  EXCL          JULY   23/75  INSIDE NATIVE

                           NUMBER PLOTS = 20
                              PLOT SIZE 1X1
PLANT  PLANT   TOTAL   AVE.   PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE   NAME    TRANS   PER-   COMPO-   PLOT    WGT.    WGT.    UNIT    PER
               BASAL   CENT   SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
               AREA    BASAL           BASE    SQ.FT.  OCCUR-  AREA
               PER-    AREA            20              RENCES
               CENT

  6    *ARTR   173.00 8.65E+00          6
  6    *OPPO    83.00 4.15E+00          4
   PER GRASS    33.40  1.67            18      47.75    2.65    1.43 229.28
  3     AGSM    20.60 1.03E+00 4.27E+01 18      39.95    2.22    1.94   1.9183E+02
  3     POSE    11.20 5.60E-01 2.32E+01 16       5.35    0.33    0.48   2.5689E+01
  3     SIHY     0.30 1.50E-02 6.21E-01  1       0.98    0.98    3.27   4.7057E+00
  3     STCO     1.30 6.50E-02 2.69E+00  1       1.47    1.47    1.13   7.0585E+00
   ANN GRASS    13.50  0.67            16       7.80    0.49    0.58  37.45
  5     BRTE     7.40 3.70E-01 1.53E+01 16
  5     VUOC     6.10 3.05E-01 1.26E+01 11
   ANN FORBS     1.40  0.07             3       0.64    0.21    0.46    3.07
  4     CHEN     0.10 T        2.07E-01  1
  4     DEPI     0.40 2.00E-02 8.28E-01  3
  4     LEDE     0.60 3.00E-02 1.24E+00  3
  4     PLSP     0.30 1.50E-02 6.21E-01  2
      TOTAL          15.21    100.00          5.6190E+01                2.6981E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR		113.74
OPPO		14.61
	Shrub Prod.	128.33
	Total	398.16

```
PRECIPITATION DATA
 RAIN GAUGE NO.        SMILO  EXCL           JULY   23/75
OCT. 15 TO APR. 15 =    3.71
APR. 15 TO JULY 1  =    6.09
JULY 1 TO SEPT. 1  =    1.04
SEPT. 1 TO OCT. 15 =     .77
SEASON TOTAL       =   11.61
LONG TERM AVERAGE  =    8.42
```

**No utilization

```
         2009   SMILO  EXCL            JULY    23/75  OUT     NATIVE

                                   NUMBER PLOTS = 20
                                      PLOT SIZE 1X1
PLANT   PLANT   TOTAL    AVE.     PERCENT   ABS.     TOTAL    AVE.     WGT./    LBS
CODE    NAME    TRANS    PER-     COMPO-    PLOT     WGT.     WGT.     UNIT     PER
                BASAL    CENT     SITION    FREQ.    GMS/20   /PLOT    BASAL    AC.
                AREA     BASAL              BASE     SQ.FT.   OCCUR-   AREA
                PER-     AREA               20                RENCES
                CENT

  6     *ARTR   462.00  2.31E+01             15
  6     *OPPO    45.70  2.28E+00              4
   PER GRASS     31.80    1.59               18       44.81    2.49     1.41  215.16
  3     AGSM      4.90  2.45E-01  1.10E+01    4       10.91    2.73     2.23   5.2386E+01
  3     BOGR      0.80  4.00E-02  1.80E+00    1        0.60    0.60     0.75   2.8810E+00
  3     POSE     17.50  8.75E-01  3.94E+01   18       11.86    0.66     0.68   5.6948E+01
  3     SIHY      6.40  3.20E-01  1.44E+01    6       15.70    2.62     2.45   7.5387E+01
  3     STCC      2.20  1.10E-01  4.95E+00    3        5.74    1.91     2.61   2.7562E+01
   PER FORBS      1.00    0.05                1        0.05    0.05     0.05    0.24
  2     CRP       1.00  5.00E-02  2.25E+00    1
   ANN GRASS      8.60    0.43               16       19.93    1.25     2.32   95.70
  5     BRTE      4.40  2.20E-01  9.91E+00   16
  5     VUOC      4.20  2.10E-01  9.46E+00   11
   ANN FORBS      3.00    0.15                9        2.11    0.23     0.70   10.13
  4     CHEN      0.10  T         2.25E-01    1
  4     DEPI      0.50  2.50E-02  1.13E+00    4
  4     LARE      0.50  2.50E-02  1.13E+00    3
  4     LEPE      0.30  1.50E-02  6.76E-01    2
  4     PLSP      1.60  8.00E-02  3.60E+00    9
     TOTAL               27.60     100.00            6.6900E+01                 3.2123E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        ARTR                                                                  154.36
        OPPO                                                                    7.44
        PHHO                                                                    0.45
                                                          Shrub Prod.         162.25
                                                                Total         483.48

PRECIPITATION DATA
 RAIN GUAGE NO.        SMILO  EXCL           JULY   23/75
OCT. 15 TO APR. 15 =    3.71
APR. 15 TO JULY 1  =    6.09
JULY 1 TO SEPT. 1  =    1.04
SEPT. 1 TO OCT. 15 =     .77
SEASON TOTAL       =   11.61
LONG TERM AVERAGE  =    8.42

        **No utilization
```

```
20 54   JUN 29  RUN3EBA...
            2009    SMILO  EXCL                JULY   23/75  INSIDE SPRAY

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.      TOTAL   AVE.     WGT./   LBS
CODE    NAME     TRANS   PER-    COMPO-    PLOT      WGT.    WGT.     UNIT    PER
                 BASAL   CENT    SITION    FREQ.     GMS/20  /PLOT    BASAL   AC.
                 AREA    BASAL             BASE      SQ.FT.  OCCUR-   AREA
                 PER-    AREA              20                RENCES
                 CENT

   PER GRASS     17.10   0.85                    9     27.08    3.01   1.58 130.03
 3    AGSM        5.20 2.60E-01 5.45E+00  9     12.87    1.43   2.47  6.1798E+01
 3    POSE        4.40 2.20E-01 4.61E+00  4      3.11    0.78   0.71  1.4933E+01
 3    SIHY        1.40 7.00E-02 1.47E+00  2      2.48    1.24   1.77  1.1908E+01
 3    STCC        6.10 3.05E-01 6.39E+00  5      8.62    1.72   1.41  4.1391E+01
   ANN FORBS      5.70  0.28                     5     28.54    5.71   5.01 137.04
 4    DEPI        1.00 5.00E-02 1.05E+00  5
 4    PLSP        1.70 8.50E-02 1.78E+00  3
 4    UNK         3.00 1.50E-01 3.14E+00  1
   ANN GRASS     72.70  3.63                    19    178.77    9.41   2.46 858.40
 5    BRTE       70.50 3.52E+00 7.38E+01 19
 5    VUOC        2.20 1.10E-01 2.30E+00  5
     TOTAL              4.77    100.00           2.3439E+02              1.1255E+03

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                                 66.15
        OPPO                                                                 14.59
                                                          Shrub Prod.        80.74
PRECIPITATION DATA                                              Total     1,206.24
 RAIN GUAGE NO.          SMILO  EXCL             JULY     23/75
OCT. 15 TO APR. 15 =   3.71
APR. 15 TO JULY 1  =   6.09
JULY 1 TO SEPT. 1  =   1.04
SEPT. 1 TO OCT. 15 =    .77
SEASON TOTAL       =  11.61
LONG TERM AVERAGE  =   8.42


        **No utilization
```

```
         2009   SMILO  EXCL           JULY   22/75  OUT    SPRAY

                              NUMBER PLOTS = 20
                                PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CCDE    NAME    TRANS   PER-    COMPC-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITICN   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT

  6    *ARTR    10.00 5.00E-01               1
  6    *OPPO    25.50 1.27E+00               2
  PER GRASS     10.40  0.52                 11     47.23    4.29   4.54 226.78
  3    AGSM      5.70 2.85E-01 6.39E+00 11     35.22    3.20   6.18  1.6912E+02
  3    POSE      3.10 1.55E-01 3.48E+00  5      2.10    0.42   0.68  1.0084E+01
  3    SIHY      0.60 3.00E-02 6.73E-01  1      3.09    3.09   5.15  1.4837E+01
  3    STCC      1.00 5.00E-02 1.12E+00  1      6.82    6.82   6.82  3.2748E+01
  ANN GRASS     68.20  3.41                 20    272.70   13.63   4.00  1,308.96
  5    BRTE     53.30 2.66E+00 5.98E+01 20
  5    VUOC     14.90 7.45E-01 1.67E+01 16
  ANN FORBS     10.60  0.53                 10     11.25    1.12   1.06  54.02
  4    CHEN      0.90 4.50E-02 1.01E+00  5
  4    DEPI      4.80 2.40E-01 5.38E+00 10
  4    LARE      1.00 5.00E-02 1.12E+00  6
  4    PLSP      2.00 1.00E-01 2.24E+00  6
  4    SAKA      0.70 3.50E-02 7.85E-01  1
  4    UNK       1.20 6.00E-02 1.35E+00  2
     TOTAL            6.23    100.00          3.3118E+02              1.5902E+03

      * NOT COMPUTED IN PERCENT COMPOSITICN
      T - TRACE

PRODUCTION ESTIMATES CF SHRUBS ANC WOODY MAT FORM PLANTS
```

ARTR		4.06
OPPO		55.62
	Shrub Prod.	59.68
	Total	1,649.88

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SMILO  EXCL          JULY   22/75
CCT. 15 TC APR. 15 =   3.71
APR. 15 TC JULY 1  =   6.09
JULY 1 TO SEPT. 1  =   1.04
SEPT. 1 TC OCT. 15 =    .77
SEASCN TOTAL       =  11.61
LCNG TERM AVERAGE  =   8.42
```

**No utilization

```
20 39   JUN 29  RUNUEBA...
           1005    SWEET  WATER  EXCL    JULY    24/75  INSIDE ARNO

                                NUMBER PLOTS = 20
                                   PLOT SIZE 1X1
PLANT    PLANT    TOTAL   AVE.    PERCENT   ABS.     TOTAL   AVE.    WGT./   LBS
CODE     NAME     TRANS   PER-    COMPO-    PLOT     WGT.    WGT.    UNIT    PER
                  BASAL   CENT    SITION    FREQ.    GMS/20  /PLOT   BASAL   AC.
                  AREA    BASAL             BASE     SQ.FT.  OCCUR-  AREA
                  PER-    AREA              20               RENCES
                  CENT

   6    *ARHO    352.00 1.76E+01                8
   6    *TECA     50.00 2.50E+00                1
    PER GRASS     25.30  1.26                  13     42.96    3.30   1.70 206.28
   3    AGSM       0.10 T         2.27E-01      1      0.11    0.11   1.10  5.2819E-01
   3    CAFI       0.90 4.50E-02 2.05E+00      2      1.40    0.70   1.56  6.7224E+00
   3    CAEL       0.50 2.50E-02 1.14E+00      2      0.47    0.23   0.94  2.2568E+00
   3    KOCR       7.00 3.50E-01 1.59E+01      9      9.23    1.03   1.32  4.4320E+01
   3    ORHY       2.00 1.00E-01 4.55E+00      1      3.29    3.29   1.64  1.5798E+01
   3    POSE       1.30 6.50E-02 2.95E+00      2      1.25    0.62   0.96  6.0021E+00
   3    STCC      13.50 6.75E-01 3.07E+01     13     27.21    2.09   2.02  1.3065E+02
    PER FORBS     18.70  0.93                   5     14.63    2.93   0.78  70.25
   2    COPA       0.50 2.50E-02 1.14E+00      1
   2    CRFL       6.20 3.10E-01 1.41E+01      3
   2    PSTE      10.00 5.00E-01 2.27E+01      5
   2    VIO        2.00 1.00E-01 4.55E+00      1
      TOTAL             22.30     100.00             5.7590E+01                2.7653E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                                  1.71
        ARNO                                                                137.71
        ARTR                                                                 60.65
        CHVI                                                                 25.42
        OPPO                                                                  1.55
        PHHO                                                                 12.70
PRECIPITATION DATA                                              Shrub Prod.  239.74
 RAIN GUAGE NO.        SWEET  WATER  EXCL    JULY    24/75            Total  516.27
OCT. 15 TO APR. 15 =    2.65
APR. 15 TO JULY 1  =    8.45
JULY 1 TO SEPT. 1  =    3.61
SEPT. 1 TO OCT. 15 =     .63
SEASON TOTAL       =   15.34
LONG TERM AVERAGE  =    8.89

        **No utilization
```

```
         1005   SWEET  WATER  EXCL   JULY   24/75  OUT    ARNO

                             NUMBER PLOTS = 20
                               PLOT SIZE 1X1
PLANT  PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CODE   NAME    TRANS   PER-    COMPO-   PLOT    WGT.    WGT.    UNIT    PER
               BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
               AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
               PER-    AREA             20              RENCES
               CENT

  6    *ARNO   351.00 1.75E+01              8
  6    *ARTR    58.00 2.90E+00              2
  6    *OPPO     8.00 4.00E-01              1
  6    *TECA    32.00 1.60E+00              3
  PER GRASS     20.20  1.01                10     33.60     3.36   1.66  161.34
  3    AGSM      2.10 1.05E-01 3.37E+00     5      2.33     0.47   1.11   1.1188E+01
  3    CAEL      1.90 9.50E-02 3.04E+00     7      1.58     0.23   0.83   7.5867E+00
  3    CAFI      1.90 9.50E-02 3.04E+00     4      2.80     0.70   1.47   1.3445E+01
  3    KOCR      5.50 2.75E-01 8.81E+00     8     10.89     1.36   1.98   5.2290E+01
  3    ORHY      1.10 5.50E-02 1.76E+00     3      2.19     0.73   1.99   1.0516E+01
  3    STCO      7.70 3.85E-01 1.23E+01    10     13.81     1.38   1.79   6.6311E+01
  PER FORBS     42.20  2.11                11     21.56     1.96   0.51  103.52
  2    PEN       4.00 2.00E-01 6.41E+00     1
  2    PSTE     37.20 1.86E+00 5.96E+01    11
  2    VIO       1.00 5.00E-02 1.60E+00     1
     TOTAL            25.57   100.00             5.5160E+01              2.6486E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARNO	101.68
ARTR	204.41
CHVI	34.63
LEPU	3.34
OPPO	1.34
PHHO	7.27
TECA	9.79
Shrub Prod.	362.46
Total	627.32

```
PRECIPITATION DATA
 RAIN GUAGE NO.        SWEET  WATER  EXCL   JULY   24/75
OCT. 15 TO APR. 15 =    2.65
APR. 15 TO JULY 1  =    8.45
JULY 1 TO SEPT. 1  =    3.61
SEPT. 1 TO OCT. 15 =     .63
SEASON TOTAL       =   15.34
LONG TERM AVERAGE  =    8.89
```

**No utilization

```
       1005    SWEET   WATER   EXCL    JULY    24/75  INSIDE ARTR

                                  NUMBER PLOTS = 20
                                PLOT  SIZE 1X1
  PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL    AVE.     WGT./   LBS
  CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.     WGT.     UNIT    PER
                  BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT     BASAL   AC.
                  AREA    BASAL             BASE    SQ.FT.  OCCUR-    AREA
                  PER-    AREA              20              RENCES
                  CENT

   6    *ARTR    105.00 5.25E+00              4
   6    *GUSA     23.00 1.15E+00              2
   6    *OPPO      7.20 3.60E-01              2
   6    *PHHO     11.00 5.50E-01              2
    PER GRASS     36.00   1.80               14     73.23     5.23    2.03 351.63
   3     AGSM      2.70 1.35E-01 3.09E+00   5      5.14     1.03    1.90   2.4681E+01
   3     CAEL      4.50 2.25E-01 5.14E+00  13      5.67     0.44    1.26   2.7226E+01
   3     CAFI      6.60 3.30E-01 7.54E+00   9      7.43     0.83    1.13   3.5677E+01
   3     KOCR      6.80 3.40E-01 7.77E+00   9     11.92     1.32    1.75   5.7236E+01
   3     POSE      0.40 2.00E-02 4.57E-01   2      0.09     0.04    0.22   4.3215E-01
   3     STCO     15.00 7.50E-01 1.71E+01  14     42.98     3.07    2.87   2.0638E+02
    PER FORBS     51.00   2.55                8     26.31     3.29    0.52 126.33
   2     AST       5.00 2.50E-01 5.71E+00   2
   2     PSTE     46.00 2.30E+00 5.26E+01   8
    ANN FORBS      0.50   0.02                1      1.72     1.72    3.44    8.26
   4     UNK       0.50 2.50E-02 5.71E-01   1
      TOTAL             11.68     100.00         1.0126E+02                4.8622E+02

          * NOT COMPUTED IN PERCENT COMPOSITION
          T - TRACE

   PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARHO		11.23
ARTR		289.90
CHVI		56.82
LEPU		0.91
OPPO		0.72
PHHO		41.64
TECA		2.17
	Shrub Prod.	403.39
	Total	679.92

```
   PRECIPITATION DATA
    RAIN GUAGE NO.          SWEET   WATER   EXCL    JULY    24/75
   OCT. 15 TO APR. 15 =   2.65
   APR. 15 TO JULY 1  =   8.45
   JULY 1 TO SEPT. 1  =   3.61
   SEPT. 1 TO OCT. 15 =    .63
   SEASON TOTAL       =  15.34
   LONG TERM AVERAGE  =   8.89
```

**No utilization

```
21 20    JUN 29  RUNKFBA...
           1005    SWEET  WATER   EXCL     JULY    24/75   OUT      ARTR

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.     PERCENT   ABS.     TOTAL    AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-     COMPO-    PLOT     WGT.     WGT.     UNIT     PER
                 BASAL   CENT     SITION    FREQ.    GMS/20   /PLOT    BASAL    AC.
                 AREA    BASAL              BASE     SQ.FT.   OCCUR-   AREA
                 PER-    AREA               20                RENCES
                 CENT

  6    *ARNO       8.00 4.00E-01               1
  6    *ARTR     238.50 1.19E+01              10
  6    *EULA       1.00 5.00E-02               1
  6    *GUSA       5.50 2.75E-01               4
  6    *PHHO      25.30 1.26E+00               7
   PER GRASS      38.60  1.93                 15      55.62     3.71     1.44  267.07
  3     AGSM       8.30 4.15E-01 1.52E+01 15      12.87     0.86     1.55   6.1798E+01
  3     CAEL       5.70 2.85E-01 1.04E+01 13       4.87     0.37     0.85   2.3384E+01
  3     CAFI      13.40 6.70E-01 2.45E+01 14      17.93     1.28     1.34   8.6094E+01
  3     KOCR       6.00 3.00E-01 1.10E+01  7      11.96     1.71     1.99   5.7428E+01
  3     POSE       0.60 3.00E-02 1.10E+00  1       0.19     0.19     0.32   9.1232E-01
  3     STCO       4.60 2.30E-01 8.42E+00  6       7.80     1.30     1.70   3.7453E+01
   PER FORBS      16.00  0.80                  2       8.09     4.04     0.51   38.85
  2     AST       10.00 5.00E-01 1.83E+01  1
  2     SPCO       6.00 3.00E-01 1.10E+01  2
    TOTAL             16.64     100.00            6.3710E+01                 3.0592E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        ARHO                                                                  3.88
        ARTR                                                                429.36
        CHVI                                                                 59.21
        LEPU                                                                  0.76
        OPPO                                                                  2.17
        PHHO                                                                 23.06
                                                        Shrub Prod.         518.44
                                                              Total         824.36

PRECIPITATION DATA
 RAIN GUAGE NO.          SWEET   WATER   EXCL     JULY    24/75
OCT. 15 TO APR. 15 =   2.65
APR. 15 TO JULY 1  =   8.45
JULY 1 TO SEPT. 1  =   3.61
SEPT. 1 TO OCT. 15 =    .63
SEASON TOTAL       =  15.34
LONG TERM AVERAGE  =   8.89

      **No utilization
```

```
16 11    JUL 01  RUNGJCA...
              2010    TWO     MILE    HILL    JULY    17/75  INSIDE NATIVE

                                NUMBER OF PLOTS
                         COVER = 200, PRODUCTION = 20
                          PLOT SIZE 1 FT. X 10 FT.
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.     TOTAL    AVE.     WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT     WGT.     WGT.     UNIT    PER
                BASAL   CENT    SITION    FREQ.    GMS/     /PLOT    BASAL   AC.
                AREA    BASAL             BASE     200      OCCUR-   AREA
                PER-    AREA              200      SQ.FT.   RENCES
                CENT

  1  ATNU     1090.0   5.45E+00 7.81E+01102     563.32     5.52   0.52   2.7049E+02
   PER GRASS   130.3   6.51E-01              96     685.08     7.14   5.26   3.2895E+02
  3  POSE       39.0   1.95E-01 2.80E+00 55      40.38     0.73   1.04   1.9389E+01
  3  SIHY       91.3   4.56E-01 6.54E+00 96     644.70     6.72   7.06   3.0957E+02
   PER FORBS   10.50   0.05                  18       4.83     0.27   0.46    2.32
  2  ALTE        2.6   1.30E-02 1.86E-01  4
  2  CYMO        3.3   1.65E-02 2.37E-01  2
  2  CECA        4.6   2.30E-02 3.30E-01 18
   ANN GRASS  102.60   0.51                 164     302.94     1.85   2.95 145.46
  5  BRJA       58.4   2.92E-01 4.19E+00164
  5  BRTE       44.2   2.21E-01 3.17E+00136
   ANN FORBS   61.60   0.31                 134     219.83     1.64   3.57 105.56
  4  CAMI        1.6   T          1.15E-01 14
  4  CEPI        2.8   1.40E-02 2.01E-01 20
  4  HEPE       23.6   1.18E-01 1.69E+00 96
  4  LARE       31.8   1.59E-01 2.28E+00134
  4  LEDE        1.2   T          8.60E-02 10
  4  MATA        0.6   T          4.30E-02  2
     TOTAL             7.0       100.00         1.77600E+03               8.52781E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS

        ARTR                                                                     8.12
        OPPO                                                                    10.34
        PHHO                                                                     0.44
                                                              Shrub Prod.       18.93
PRECIPITATION DATA                                                  Total      871.71
 RAIN GUAGE NO.         TWO     MILE    HILL    JULY    17/75
OCT. 15 TO APR. 15 =    3.74
APR. 15 TO JULY 1  =    5.23
JULY 1 TO SEPT. 1  =    NR
SEPT. 1 TO OCT. 15 =    1.82
SEASON TOTAL       =   10.79
LONG TERM AVERAGE  =    9.45

        **No utilization
```

```
16 09   JUL 01  RUN4ICA...
        2010   TWO    MILE   HILL    JULY   17/75  OUT    NATIVE

                       NUMBER OF PLOTS
               COVER = 200, PRODUCTION = 20
                 PLOT SIZE 1 FT. X 10 FT.
PLANT  PLANT   TOTAL  AVE.   PERCENT  ABS.    TOTAL  AVE.    WGT./  LBS
CODE   NAME    TRANS  PER-   COMPO-   PLOT    WGT.   WGT.    UNIT   PER
               BASAL  CENT   SITION   FREQ.   GMS/   /PLOT   BASAL  AC.
               AREA   BASAL           BASE    200    OCCUR-  AREA
               PER-   AREA            200     SQ.FT. RENCES
               CENT

 1  ATNU     1820.0  9.10E+00 8.64E+01122    907.11    7.44   0.50  4.3557E+02
  PER GRASS   17.9   8.95E-02            34    15.91    0.47   0.89  7.6395E+00
 3  AGCR       0.3   T         1.46E-02   3     0.90    0.30   3.00  4.3215E-01
 3  POSE       9.6   4.80E-02 4.66E-01  24     7.35    0.31   0.77  3.5292E+00
 3  SIPY       8.0   4.00E-02 3.89E-01  34     7.66    0.23   0.96  3.6781E+00
  PER FORBS   2.40   0.01                 8     1.84    0.23   0.77    0.88
 2  CECA       2.4   1.20E-02 1.17E-01   8
  ANN GRASS 130.80   0.65               196   572.82    2.92   4.38 275.05
 5  BRJA     113.8   5.69E-01 5.53E+00196
 5  BRTE      17.0   8.50E-02 8.26E-01  74
  ANN FORBS  87.70   0.44               138   375.42    2.72   4.28 180.27
 4  CAMI       5.6   2.80E-02 2.72E-01  34
 4  CHEN       0.4   T         1.94E-02   2
 4  DEPI       1.4   T         6.80E-02   6
 4  HEPE      45.6   2.28E-01 2.21E+00138
 4  LARE      34.0   1.70E-01 1.65E+00133
 4  LEDE       0.3   T         1.46E-02   3
 4  PLSP       0.4   T         1.94E-02   2
    TOTAL          10.3      100.00          1.87310E+03              8.99405E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


      ARTR                                                             7.16
      OPPO                                                             6.85
                                                 Shrub Prod.          14.01
PRECIPITATION DATA                                   Total           913.42
 RAIN GUAGE NO.        TWO    MILE    HILL    JULY    17/75
OCT. 15 TO APR. 15 =   3.74
APR. 15 TO JULY 1  =   5.23
JULY 1 TO SEPT. 1  =   NR
SEPT. 1 TO OCT. 15 =   1.82
SEASON TOTAL       =  10.79
LONG TERM AVERAGE  =   9.45

      **No utilization
```

```
20 41   JUN 29  RUNVEBA...
           1006   UPPER  GOVT    DRAW    AUG     19/75  INSIDE NATIVE

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
PLANT   PLANT   TOTAL   AVE.    PERCENT  ABS.    TOTAL   AVE.    WGT./   LBS
CCDE    NAME    TRANS   PER-    COMPC-   PLOT    WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION   FREQ.   GMS/20  /PLOT   BASAL   AC.
                AREA    BASAL            BASE    SQ.FT.  OCCUR-  AREA
                PER-    AREA             20              RENCES
                CENT

  6    *ARTR   170.00 8.50E+00              9
  6    *PHHO    47.00 2.35E+00              9
   PER GRASS    39.60  1.98                20      97.11    4.86   2.45 466.29
  3    AGSM     15.60 7.80E-01 3.87E+01 20      51.91    2.60   3.33   2.4926E+02
  3    KOCR     20.00 1.00E+00 4.96E+01 15      43.06    2.87   2.15   2.0676E+02
  3    POSE      4.00 2.00E-01 9.93E+00  8       2.14    0.27   0.53   1.0276E+01
   PER FORBS     0.60  0.03                 2       0.20    0.10   0.33    0.96
  2    ERPU      0.60 3.00E-02 1.49E+00  2
   ANN FORBS     0.10  0.00                 1       0.01    0.01   0.10    0.05
  4    DEPI      0.10 T          2.48E-01  1
     TOTAL            12.86    100.00           9.7320E+01              4.6730E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARTR	259.82
CHVI	0.29
OPPO	4.37
PHHO	14.45
Shrub Prod.	278.93
Total	746.23

```
PRECIPITATION DATA
 RAIN GUAGE NC.        UPPER  GOVT    DRAW    AUG     19/75
OCT. 15 TC APR. 15 =   RI7.20
APR. 15 TC JULY 1  =     6.88
JULY 1 TO SEPT. 1  =      .36
SEPT. 1 TC OCT. 15 =      .75
SEASCN TOTAL       =    15.19
LCNG TERM AVERAGE  =     9.16
```

**No utilization

```
        1006   UPPER  GOVT   DRAW   AUG    19/75  OUT    NATIVE

                               NUMBER PLOTS = 20
                                 PLOT SIZE 1X1
 PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.    TOTAL   AVE.    WGT./   LBS
 CODE    NAME    TRANS   PER-    COMPO-    PLOT    WGT.    WGT.    UNIT    PER
                 BASAL   CENT    SITION    FREQ.   GMS/20  /PLOT   BASAL   AC.
                 AREA    BASAL             BASE    SQ.FT.  OCCUR-  AREA
                 PER-    AREA              20              RENCES
                 CENT

  6    *ARTR     53.00 2.65E+00             11
  6    *PHHO    125.30 6.26E+00             13
   PER GRASS     34.20  1.71                20      48.82    2.44    1.43 234.42
  3     AGSM     13.50 6.75E-01 3.54E+01 20      36.26    1.81    2.69  1.7411E+02
  3     KOCR     12.90 6.45E-01 3.39E+01 15       9.58    0.64    0.74  4.6000E+01
  3     POSE      7.80 3.90E-01 2.05E+01 16       2.98    0.19    0.38  1.4309E+01
   PER FORBS      3.50  0.17                 4       3.13    0.78    0.89  15.03
  2     ERPU      0.20 T          5.25E-01   1
  2     PEN       2.00 1.00E-01 5.25E+00  1
  2     SPCC      1.30 6.50E-02 3.41E+00  4
   ANN FORBS      0.40  0.02                 2       0.07    0.03    0.17   0.34
  4     PLSP      0.40 2.00E-02 1.05E+00  2
     TOTAL           10.82    100.00           5.2020E+01              2.4978E+02

      * NOT COMPUTED IN PERCENT COMPOSITION
      T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


      ARTR                                                          244.70
      OPPO                                                            2.69
      PHHO                                                           20.93
                                               Shrub Prod.          268.32
                                                     Total          518.10
PRECIPITATION DATA
 RAIN GUAGE NO.        UPPER  GOVT   DRAW   AUG     19/75
OCT. 15 TO APR. 15 =   RI7.20
APR. 15 TO JULY 1  =     6.88
JULY 1 TO SEPT. 1  =      .36
SEPT. 1 TO OCT. 15 =      .75
SEASON TOTAL       =    15.19
LONG TERM AVERAGE  =     9.16


                                                  Utilization   268.73
                                           Production Adjusted  786.83
```

```
          1006   UPPER  GOVT   DRAW   AUG    19/75  INSIDE SPRAY

                                   NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT  PLANT  TOTAL  AVE.   PERCENT  ABS.    TOTAL  AVE.    WGT./  LBS
CODE   NAME   TRANS  PER-   COMPO-   PLOT    WGT.   WGT.    UNIT   PER
              BASAL  CENT   SITION   FREQ.   GMS/20 /PLOT   BASAL  AC.
              AREA   BASAL           BASE    SQ.FT. OCCUR-  AREA
              PER-   AREA            20             RENCES
              CENT

   PER GRASS  41.10  2.05               20   120.82    6.04   2.94 580.14
  3   AGSM    22.80 1.14E+00 4.46E+01 20      89.92    4.50   3.94   4.3177E+02
  3   KOCR     4.70 2.35E-01 9.20E+00  4      11.63    2.91   2.47   5.5844E+01
  3   POSE     7.10 3.55E-01 1.39E+01 13       4.62    0.36   0.65   2.2184E+01
  3   STCO     6.50 3.25E-01 1.27E+01  4      14.65    3.66   2.25   7.0345E+01
   PER FORBS   1.60  0.08                2     1.41    0.70   0.88    6.77
  2   PHMU     0.60 3.00E-02 1.17E+00  2
  2   SPCO     1.00 5.00E-02 1.96E+00  1
   ANN GRASS   4.70  0.23               14     5.84    0.42   1.24   28.04
  5   BRTE     4.70 2.35E-01 9.20E+00 14
   ANN FORBS   3.70  0.18                9     2.70    0.30   0.73   12.96
  4   DEPI     0.60 3.00E-02 1.17E+00  3
  4   LEDE     0.20 T          3.91E-01  1
  4   PLSP     2.90 1.45E-01 5.68E+00  9
     TOTAL          2.55    100.00          1.3077E+02                6.2792E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T = TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARTR                                                                 3.02
        OPPO                                                                 1.63
        PHHO                                                                 1.63
PRECIPITATION DATA                                              Shrub Prod.  6.28
 RAIN GUAGE NO.        UPPER  GOVT   DRAW   AUG    19/75              Total 634.20
OCT. 15 TO APR. 15 =   RI7.20
APR. 15 TO JULY 1  =     6.88
JULY 1 TO SEPT. 1  =      .36
SEPT. 1 TO OCT. 15 =      .75
SEASON TOTAL       =    15.19
LONG TERM AVERAGE  =     9.16

        **No utilization
```

```
21 20    JUN 29  RUNIFBA...
             1006    UPPER  GOVT    DRAW    AUG     19/75  OUT     SPRAY

                                  NUMBER PLOTS = 20
                                     PLOT SIZE 1X1
PLANT   PLANT    TOTAL   AVE.      PERCENT  ABS.    TOTAL    AVE.     WGT./    LBS
CODE    NAME     TRANS   PER-      COMPO-   PLOT    WGT.     WGT.     UNIT     PER
                 BASAL   CENT      SITION   FREQ.   GMS/20   /PLOT    BASAL    AC.
                 AREA    BASAL              BASE    SQ.FT.   OCCUR-   AREA
                 PER-    AREA               20               RENCES
                 CENT

  6    *ARTR     52.00 2.60E+00               3
  6    *PHHO      6.70 3.35E-01               3
   PER GRASS     43.00  2.15                 20      55.20     2.76    1.28 265.05
  3     AGSM     15.00 7.50E-01 3.28E+01 20      36.89     1.84    2.46   1.7713E+02
  3     KOCR      4.70 2.35E-01 1.03E+01 11       4.01     0.36    0.85   1.9255E+01
  3     POSE     18.00 9.00E-01 3.93E+01 19       9.13     0.48    0.51   4.3839E+01
  3     STCC      5.30 2.65E-01 1.16E+01  8       5.17     0.65    0.98   2.4825E+01
   ANN FORBS      2.80  0.14                 11       0.66     0.06    0.24    3.17
  4     PLSP      2.80 1.40E-01 6.11E+00 11
     TOTAL             5.22     100.00          5.5860E+01                 2.6822E+02

       * NOT COMPUTED IN PERCENT COMPOSITION
       T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAI FORM PLANTS



       ARTR                                                                   13.39
       PHHO                                                                   10.27
                                                              Shrub Prod.     23.66
                                                                    Total    291.88
PRECIPITATION DATA
 RAIN GUAGE NO.          UPPER  GOVT    DRAW    AUG     19/75
OCT. 15 TO APR. 15 =    RI7.20
APR. 15 TO JULY 1  =      6.88
JULY 1 TO SEPT. 1  =       .36
SEPT. 1 TO OCT. 15 =       .75
SEASON TOTAL       =     15.19
LONG TERM AVERAGE  =      9.16



                                                         Utilization   280.93
                                                 Production Adjusted   572.81
```

```
16 09   JUL 01  RUN2ICA...
            2006    WEST    PASTUR EXCL     JULY    8/75    INSIDE NATIVE

                              NUMBER OF PLOTS
                      COVER = 200, PRODUCTION = 20
                         PLOT SIZE 1 FT. X 10 FT.
 PLANT   PLANT    TOTAL   AVE.    PERCENT   ABS.    TOTAL    AVE.    WGT./   LBS
 CODE    NAME     TRANS   PER-    COMPO-    PLOT    WGT.     WGT.    UNIT    PER
                  BASAL   CENT    SITION    FREQ.   GMS/     /PLOT   BASAL   AC.
                  AREA    BASAL             BASE    200      OCCUR-  AREA
                  PER-    AREA              200     SQ.FT.   RENCES
                  CENT

  6   *ARPE     672.8   3.36E+00            57
  6   *OPPO     138.5   6.92E-01            30
  1   ATNU      891.0   4.45E+00 6.64E+01  85    668.80    7.87   0.75   3.2114E+02
   PER GRASS    220.6   1.10E+00           92    252.76    2.75   1.15   1.2137E+02
  3   BOGR       26.0   1.30E-01 1.94E+00   5     14.96    2.99   0.58   7.1833E+00
  3   CRHY       27.6   1.38E-01 2.06E+00  80     28.95    0.36   1.05   1.3901E+01
  3   POSE       78.2   3.91E-01 5.83E+00  43     13.14    0.31   0.17   6.3094E+00
  3   SIHY       82.3   4.11E-01 6.13E+00  92    190.18    2.07   2.31   9.1319E+01
  3   SPCR        6.5   3.25E-02 4.84E-01  15      5.53    0.37   0.85   2.6553E+00
   PER FORBS    160.60   0.80              38     68.52    1.80   0.43   32.90
  2   ALTE       79.6   3.98E-01 5.93E+00  38
  2   MUDI       81.0   4.05E-01 6.04E+00  15
   ANN FORBS     69.50   0.35              29     30.72    1.06   0.44   14.75
  4   AST         0.6   T        4.47E-02   2
  4   GIPU        1.0   T        7.45E-02   7
  4   MATA       22.7   1.13E-01 1.69E+00  13
  4   LARE        1.6   T        1.19E-01   9
  4   LEDE        0.3   T        2.24E-02   2
  4   PLPA        7.7   3.85E-02 5.74E-01  17
  4   UNK1       35.6   1.78E-01 2.65E+00  29
      TOTAL              10.8     100.00         1.02080E+03            4.90157E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS
```

ARSP	51.01
ARPE	10.72
OPPO	21.63
Shrub Prod.	82.86
Total	573.02

```
PRECIPITATION DATA
 RAIN GUAGE NO.          WEST    PASTUR EXCL    JULY    8/75
OCT. 15 TO APR. 15 =   1.75
APR. 15 TO JULY 1  =   4.03
JULY 1 TO SEPT. 1  =    .44
SEPT. 1 TO OCT. 15 =    .26
SEASON TOTAL       =   6.48
LONG TERM AVERAGE  =   5.57
```

**No utilization

```
16 21    JUL 02  RUNL3CA...
           2006   WEST    PASTUR EXCL    JULY    8/75    OUT     NATIVE

                         NUMBER OF PLOTS
                    COVER = 200, PRODUCTION = 20
                     PLOT SIZE 1 FT. X 10 FT.
PLANT   PLANT   TOTAL   AVE.    PERCENT   ABS.   TOTAL   AVE.    WGT./   LBS
CODE    NAME    TRANS   PER-    COMPO-    PLOT   WGT.    WGT.    UNIT    PER
                BASAL   CENT    SITION    FREQ.  GMS/    /PLOT   BASAL   AC.
                AREA    BASAL             BASE   200     OCCUR-  AREA
                PER-    AREA              200    SQ.FT.  RENCES
                CENT

  6   *ARPE   1356.3   6.78E+00            132
  6   *OPPO    101.0   5.05E-01             11
  1   ATNU     670.9   3.35E+00 6.88E+01  72    624.34    8.67   0.93   2.9979E+02
   PER GRASS   159.2   7.96E-01            82    135.65    1.65   0.85   6.5135E+01
  3   CRHY      75.9   3.79E-01 7.78E+00  82     33.34    0.41   0.44   1.6009E+01
  3   POSE      19.2   9.60E-02 1.97E+00  20      6.44    0.32   0.34   3.0923E+00
  3   SIHY      63.5   3.17E-01 6.51E+00  40     95.73    2.39   1.51   4.5967E+01
  3   SPCR       0.6   T        6.15E-02   3      0.14    0.05   0.23   6.7224E-02
   PER FORBS   79.60   0.40                18     37.90    2.11   0.48   18.20
  2   ALTE       4.5   2.25E-02 4.61E-01   4
  2   MUDI      75.1   3.75E-01 7.70E+00  18
   ANN FORBS   65.60   0.33                28     34.64    1.24   0.53   16.63
  4   AST        8.4   4.20E-02 8.61E-01  10
  4   GIPU       0.5   T        5.13E-02   3
  4   LARE       6.4   3.20E-02 6.56E-01   5
  4   LEDE      11.9   5.95E-02 1.22E+00   9
  4   MATA      35.4   1.77E-01 3.63E+00  28
  4   PLPA       3.0   1.50E-02 3.08E-01  13
      TOTAL             12.2     100.00        8.32530E+02            3.99755E+02

        * NOT COMPUTED IN PERCENT COMPOSITION
        T - TRACE

PRODUCTION ESTIMATES OF SHRUBS AND WOODY MAT FORM PLANTS


        ARSP                                                                22.34
        ARPE                                                                26.93
        OPPO                                                                22.88
                                                          Shrub Prod.       82.15
                                                                Total      481.91

PRECIPITATION DATA
 RAIN GUAGE NO.           WEST    PASTUR EXCL     JULY    8/75
OCT. 15 TO APR. 15 =    1.75
APR. 15 TO JULY 1  =    4.03
JULY 1 TO SEPT. 1  =     .44
SEPT. 1 TO OCT. 15 =     .26
SEASON TOTAL       =    6.48
LONG TERM AVERAGE  =    5.57


        **No utilization
```

ER'S CARD
OFFICE
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(Continued on reverse)

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